



COUNTY BOROUGH OF BURY.



ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR

1935,

BY

G. M. D. S. B. LOBBAN,

M.B., Ch.B., D.P.H.,

MEDICAL OFFICER OF HEALTH, SCHOOL MEDICAL OFFICER,

CHIEF TUBERCULOSIS OFFICER AND CHIEF VENEREAL


DISEASES OFFICER.



BURY ;

PRINTED AT THE "TIMES" OFFICE, CROSS STREET.

1936.



Digitized by the Internet Archive
in 2017 with funding from
Wellcome Library

<https://archive.org/details/b28968050>

TABLE OF CONTENTS.

.....

	Page
Section 1. Statistics and Social Conditions of the Area ...	9
„ 2. General Provision of Health Services in the Area... ..	25
„ 3. Sanitary Circumstances of the Area, Housing, Inspection and Supervision of Food, Production and Distribution of Milk... ..	33
„ 4. Public Abattoirs, Meat Inspection, Contagious Diseases (Animals) Acts... ..	73
„ 5. Prevalence of and Control Over Infectious and Other Diseases... ..	79
„ 6. Tuberculosis	90
„ 7. Venereal Diseases	104
„ 8. Maternity and Child Welfare	112
„ 9. Miscellaneous	124

HEALTH COMMITTEE, 1935.

Chairman - Councillor STEEN.

Deputy-Chairman - Councillor HARTLEY.

HIS WORSHIP THE MAYOR (Councillor SCHOFIELD),	Councillor CRAGG,
Alderman BATTERSBY,	„ CRAWSHAW,
„ BRADLEY,	„ GOODALL,
„ EVANS,	„ HALL
„ LEES,	„ HILL,
„ SMITH,	„ HOYLE,
„ TURNER,	„ PARTINGTON,
Councillor ASHWORTH,	„ WHITEHEAD, J.,
„ BOTTOMLEY,	„ WHITEHEAD, O. L. W.
„ BRADDOCK,	„ WILCOCK.

Meetings.—The Monday in each month immediately preceding the 16th day before the Council, at 10-0 a.m.

SUB-COMMITTEES OF THE HEALTH COMMITTEE.

Executive Sub-Committee:—Councillor Steen, Councillor Hartley, Aldermen Bradley, Evans, Smith, and Turner, and Councillors Ashworth, Cragg, Crawshaw, Hall, Hill, and Partington.

Abattoirs Sub-Committee:—Councillor Steen, Councillor Hartley, Aldermen Battersby and Lees, and Councillors Bottomley, Braddock, Goodall, Hoyle, J. Whitehead, O. L. W. Whitehead, and Wilcock.

Tuberculosis Sub-Committee:—Councillor Steen, Councillor Hartley, Aldermen Bradley and Turner, and Councillors Braddock, Goodall, J. Whitehead, and O. L. W. Whitehead.

Venereal Diseases Sub-Committee:—Councillor Steen, Councillor Hartley, Alderman Evans, and Councillors Braddock, Cragg, and Partington.

Maternity and Child Welfare Sub-Committee:—Councillor Steen, Councillor Hartley, Aldermen Battersby, Evans, Smith and Turner, and Councillors Ashworth, Bottomley, Goodall, Hill, Hoyle, O. L. W. Whitehead, and Wilcock, together with Mrs. J. E. Fargher, Miss Hopkinson, Miss Johnstone, and Mrs. A. J. Kerr.

Sub-Committee regarding re-organising of Public Health Services in the Borough:—Councillor Steen, Councillor Hartley, Aldermen Evans, Lees, and Smith, and Councillor Crawshaw.

Bury and District Joint Hospital Board.—The Bury County Borough Council's representatives on the Board are:—His Worship the Mayor (Councillor Schofield), Aldermen Bradley, Battersby, Lees, Smith and Lord, and Councillor Steen.

PUBLIC HEALTH DEPARTMENT,

TITHEBARN STREET,

BURY.

June, 1936.

To the Chairman and Members of the Health Committee.

LADIES AND GENTLEMEN,

I have the honour to present to you the Annual Report on the Health of Bury for the year 1935.

During the year under review the Public Health Committee lost a member through the death of Councillor S. Braddock. Councillor S. Braddock was much respected through the honesty and fairness of his opinions.

The Public Health Department also suffered a loss through the death of Sanitary Inspector John Haworth. Mr. Haworth had been a Sanitary Inspector in Bury for thirty-two years, and during that time performed valiant service. He was valued for his great knowledge of sanitary matters in Bury, and his advice was frequently sought concerning sanitary problems in adjoining districts.

Councillor T. Steen, the Chairman of the Health Committee, retired from the Council in November, 1935, after a period of continued ill-health. Councillor Steen worked arduously and unselfishly for the public welfare for many years, and devoted his great abilities in manifest activities for the public good. It was much regretted that one so powerful in doing good for his fellow citizens should have had to retire at the fullness of his power through ill-health. I am sure we all wish him a speedy recovery.

The Deputy Chairman, Councillor Hartley, was appointed as Chairman of the Health Committee in December in place of Councillor Steen, the Committee having full confidence that the work of the Health Committee would be carried on under the most able Chairmanship of Councillor Hartley.

Dr. J. S. Drummond, the Deputy Medical Officer of Health, was appointed in December as Medical Officer of Health to the Eastwood Urban and Basford Rural Combined district. Dr. Drummond's first appointment in Public Health was in Bury, where he served a little over two years. He was a very good deputy Medical Officer of Health, and will make an equally good Medical Officer of Health.

The year under review has been one of much re-organisation, and this report is somewhat larger than previous ones, as many new duties have been undertaken by this Department, and the scope of the various services of the department greatly amplified.

The estimated population of the Borough was 59,800, or 300 less than that estimated for 1934.

The birth rate for 1935 was 11.87 for 1,000, and is the lowest ever recorded.

The death rate was 15.00 per 1,000, and was fairly high, due, no doubt, to the prolonged inclement weather during the year.

The infantile mortality rate was 66 per 1,000 births, and is next to the lowest ever recorded, and from that point of view must be considered satisfactory.

Deaths from Cancer in the borough are apparently on the increase. On pages 18 to 20 statistics will be found which are of great interest.

The Sanitary Inspectors' Department has been entirely re-organised, and the work in this department greatly increased as a result. Transfer of new duties to the department has been effectively accomplished. Slum Clearance has been pursued consequent upon an extensive new programme formulated at the end of 1934, and which was confirmed by the Council in March, 1935, and which concerns approximately 2,000 houses. During the year three additional Sanitary Inspectors were engaged. An overcrowding survey was commenced at the end of the year, involving 15,174 houses.

Important improvements were carried out during the year in the pig slaughtering department at the Public Abattoir, and the humane method of making compulsory of stunning of all animals before slaughter was introduced, and has given general satisfaction.

With regard to infectious diseases attention is directed to the section in this report on immunisation against Diphtheria. I think there now remains little doubt that by an extensive campaign of immunisation against the disease many lives can be saved; also through a decline in the attack rate which would follow an extensive campaign of immunisation, much public money would be saved which is now devoted to treating cases in hospital.

Of much interest is the decline of the death rate and incidence of tuberculosis. On reference to page 92 it can be seen that there has been a great decrease of this disease in the borough during the last twenty-five years. Despite the fact that general practitioners and tuberculosis officers are more vigilant and competent in diagnosing the disease, in 1935 thirty-four cases of pulmonary tuberculosis were notified, which constitutes a record in being the lowest number of cases ever notified in this town.

Other services which have been completely re-organised in the borough are the Tuberculosis Service, the Venereal Diseases Service, and the Maternity and Child Welfare Service.

Regarding the Tuberculosis Service the number of clinic sessions has been trebled at The Wylde Dispensary, and one half day per week has now been devoted by the Tuberculosis Officer to home visiting. The position with regard to the examination of persons who have been in contact with individuals affected by tuberculosis has improved greatly. The examination of these contacts is a most important feature in an anti-tuberculosis scheme. Contacts are examined by the Tuberculosis Officer in order to prove that they are well. A certain amount of reluctance to visit the dispensary was exhibited at first by contacts. This reluctance in a great part has happily disappeared. Other improvements with regard to tuberculosis work have been a greater number of X-Ray examinations and sputum examinations performed, and the introduction of dental treatment for

tubercular patients. Many more samples of milk were examined for tuberculosis infection than before. The Aitken Sanatorium's extension of two new wings, with added improvements, was completed during the year.

A new clinic was constructed at the Venereal Diseases Centre, and a laboratory attached. To suit the convenience of patients the clinic sessions were increased, and the clinic opened every day except Sunday. Increased out-patient attendances resulted, and in the year under review 11,355 attendances were made. In 1932, the year before the Ministry of Health officials made a survey of the Health Services in the Borough, the out-patient attendances were 6,605. Owing to the now increased scope of the clinic the treatment is much more satisfactory.

The Maternity and Child Welfare Services were amplified during the year. The number of Welfare Clinics was increased, and the total number of attendances reached in 1935 is the highest recorded for any year since the inception of the service. Very little work had been performed previously with regard to the ante-natal and post-natal work. However, since the establishment of weekly ante- and post-natal clinics at The Wylde centre and at the Elton centre the number of attendances has increased, and at the time of writing attendances are increasing still further at these clinics. Additional facilities were made available during the year. An artificial light therapy clinic was established, and an anti-diphtheria immunisation clinic for the immunisation of pre-school children instituted. Also dental treatment was made available for ante- and post-natal cases and pre-school children. A new appointment was made in that a Consultant Obstetrician agreed to act as consultant to the Corporation Ante- and Post-Natal Clinics, and for cases of difficult labour within the borough.

An additional Assistant Medical Officer was engaged to perform work in connection with the Venereal Diseases Clinic and the Maternity and Child Welfare Clinics.

The re-organisation of the different departments commenced at the beginning of April, 1935. The results of the re-organisation are satisfactory.

The above is a bare outline of the re-organisation and improvements which have taken place in the various services under my control. No account is given of the obtaining of extensive equipment and material required for each department necessary and consequent upon re-organisation, nor of the new schemes adopted in the running of each department.

In conclusion I desire to thank you most heartily for the great support you have given me in an extremely heavy year of work. It has been a great pleasure to me to feel that I have always had your full support in carrying through a very extensive scheme in the re-organisation of the various services of The Bury Public Health Department. To all my staff I give much praise in assisting me so whole-heartedly, and to voluntary bodies, officials of institutions, and general practitioners I give my best thanks for their co-operation and help.

I am,

Ladies and Gentlemen,

Yours obediently,

G. M. D. S. B. LOBBAN.

STAFF.**PUBLIC HEALTH DEPARTMENT.**

G. M. D. S. B. LOBBAN, M.B., CH.B., D.P.H., Medical Officer of Health, Chief Maternity and Child Welfare Officer, School Medical Officer, Chief Tuberculosis Officer, Chief Venereal Diseases Officer, Supervisor of Midwives.

J. SHAW DRUMMOND, M.B., CH.B., D.P.H., Deputy Medical Officer of Health.

P. MORTON, M.A., M.B., B.CH., D.P.H. From April 1st Assistant Medical Officer of Health.

W. M. MARTIN, M.C., M.D., CH.B., D.P.H., D.C.O.G., Obstetric Consultant (Part time).

J. BYROM, L.D.S., Dental Surgeon (part-time with School Medical Service).

W. PACKMAN, M.R.C.V.S., Veterinary Surgeon (part time).

T. R. HODGSON, M.A., F.I.C., Public Analyst (part time).

J. ECKERSLEY (1, 2, 4, 5, 8), M.R.S.I., M.S.I.A., A.M.INST.P.C., Chief Sanitary Inspector, Chief Inspector under the Food and Drugs (Adulteration) Act, Marking Officer under the Merchandise Marks Acts, Inspector under the Shops Acts, the Rag Flock Act, the Diseases of Animals Acts, the Fertilisers and Feeding Stuffs Acts, the Poisons and Pharmacy Act, and Designated Officer under the Housing Consolidated Regulations.

H. WALTON, (1, 2), Cert. R.S.I., Abattoirs Superintendent, Meat Inspector, Administrative Inspector under the Diseases of Animals Acts, Certifying Officer of Dead Weight Certification Centre.

J. HAWORTH (1, 2, 6), F.S.I.A.

Died 25th April, 1935. Sanitary

Inspector.

H. HAWORTH (3, 2, 7), M.S.I.A., District Sanitary Inspector.

C. H. WRIGHT (1, 2, 9), M.S.I.A., from 13th May, District Sanitary Inspector.

F. SHACKLOCK (1, 2, 3, 6), M.S.I.A., from 13th May, District Sanitary Inspector.

A. J. MASI (1, 2), M.S.I.A., from 12th August, District Sanitary Inspector.

H. MITCHELL (1), Cert. R.S.I., District Sanitary Inspector.

L. KAY, Chief Clerk.

S. PENNINGTON, C.M.B., C.S.M.M.G., Health Visitor.

B. GREENHALGH, C.M.B., Health Visitor.

E. WEBSTER, S.R.N., C.M.B., Cert R.S.I., Health Visitor.

A. HOLLINGWORTH, S.R.N., C.M.B., Health Visitor.

E. MORAN, C.M.B., New H.V.S Cert., Joint Health Visitor and Venereal Diseases Clinic Nurse.

A. HAINES, C.M.B., Dental Nurse (part-time with School Medical Service).

J. MELLING, Male Orderly, V.D. Clinic.

Public Health Department, 3 Clerks.

Maternity and Child Welfare Department, 1 Clerk.

PUBLIC ASSISTANCE MEDICAL DEPARTMENT.

G. M. D. S. B. LOBBAN, M.B., CH.B., D.P.H., Medical Officer to the Public Assistance Committee.

H. SMITH, M.B., D.P.H., District Medical Officer and Medical Superintendent, Jericho Public Assistance Hospital.

C. G. LEES, M.B., CH.B., District Medical Officer.

PUBLIC VACCINATION.

H. SMITH, M.B., D.P.H., District Public Vaccinator.

C. G. LEES, M.B., CH.B., District Public Vaccinator.

Two District Vaccination Officers.

INFECTIOUS DISEASES.

J. B. MORTON, M.B., CH.B., Medical Superintendent, Florence Nightingale Infectious Diseases Hospital, and Ainsworth Smallpox Hospital.

A. T. ELDER, M.B., CH.B., Assistant Medical Officer, Florence Nightingale Infectious Diseases Hospital, and Ainsworth Smallpox Hospital.
Bury and District Joint Hospital Board.

TUBERCULOSIS.

J. B. MORTON, M.B., CH.B., Medical Superintendent, Aitken Sanatorium, Holcombe.

A. T. ELDER, M.B., CH.B., Assistant Medical Officer, Aitken Sanatorium, Holcombe.
Bury and District Joint Hospital Board.

Certificate of the Royal Sanitary Institute for :—

1. Sanitary Inspector.
2. Meat and Food Inspector.
3. Sanitary Science as applied to Buildings and Public Works.
4. Smoke Inspector.
5. The Advanced Knowledge of the Administrative Duties of a Sanitary Inspector.
6. Sanitary Engineering Certificate.
7. Certificate of the Royal Sanitary Institute and Sanitary Inspectors' Examination Joint Board for Sanitary Inspectors.
8. Diploma of the Institute of Public Cleansing.
9. Member Institute of Hygiene.

SECTION 1.**Statistics and Social Conditions
of the Area.**

SOCIAL CONDITIONS.

Bury is a unique Lancashire industrial town in that it is not almost wholly dependent on a few staple industries, but has a wide range of industrial processes.

The chief industries are woollen manufacturing, engineering, cotton manufacturing, silk manufacture, paper making, slipper making, bleaching, tanning and brewing.

The mean altitude is 300 feet, the highest point being 765 feet and the lowest point being 223 feet above sea level.

Bury is a healthy town. There is a good acreage and plenty of room for the establishment of new industries and housing estates. The local rates and the transport facilities are attractive. Within the confines of the borough boundaries there are parts which are quite rural.

The extent of unemployment is about 3,884 persons on a monthly average during 1935, which is approximately 16.2 per cent. of the insured persons within the Borough.

STATISTICS OF THE AREA, 1935.

GENERAL STATISTICS.

Area in Acres	7,245
Resident Population (Registrar-General's estimate) 1935...	59,800
Number of Inhabited Houses, end of 1935	17,488
Rateable Value	£364,123
Sum represented by a penny rate	£1,415

In the following summary, extracts from the vital statistics of the year are given :—

	Total.	Male.	Female	Birth rate per 1000 of the population.
Live Births { Legitimate... ..	677	325	352	11.87
{ Illegitimate... ..	33	19	14	

	Total.	Male	Female	Rate per 1000 total (live and still) births.
Still Births	41	26	15	55

								Death rate per 1000 of the population.	Standardized Death Rate.			
Deaths	897	...	465	...	432	...	15.00	15.15

Percentage of total deaths occurring in public institutions, 35.7.

Deaths from Puerperal causes :—		Deaths	Rate per 1000 total births.
Puerperal Sepsis	2	.....	2.66
Other Puerperal causes	3	.....	3.99
	—		—
Total	5	.....	6.65

Death Rate of Infants under one year of age :—

All infants per 1,000 live births	66
Legitimate infants per 1,000 legitimate live births... ..	66
Illegitimate infants per 1,000 illegitimate live births ...	60
Deaths from Measles (all ages)	3
„ from Whooping Cough (all ages)	0
„ from Diarrhœa (under 2 years of age)	2
„ from all forms of Tuberculosis	38

VITAL STATISTICS.

Population.—The Registrar-General's estimate of the population for the middle of 1935 is 59,800, or 300 less than estimated for the middle of 1934.

It has to be noted, however, that several new housing estates of private ownership have been developed in the borough in 1935.

The population at the 1931 census was returned as 56,182 (males 26,150, females 30,032).

Births.—The birth rate for 1935—11.87 per 1,000—is the lowest ever recorded. The total number of births recorded during the year was 710. The next lowest birth rate recorded was in 1931, and was 12.00 per 1,000 population. The birth rates for the last twenty-five years are shown in the following table:—

BIRTH RATES, 1911-1935.

Year.	Number of Births.	Rate per 1,000 of Population
1911	1,190	20.28
1912	1,230	20.81
1913	1,187	20.06
1914	1,162	19.62
1915	1,026	17.33
1916	900	15.47
1917	776	13.43
1918	728	12.73
1919	738	13.06
1920	1,118	19.66
1921	1,089	18.91
1922	949	16.53
1923	866	15.01
1924	883	15.54
1925	784	13.77
1926	816	14.30
1927	779	13.68
1928	744	13.02
1929	776	13.59
1930	735	12.87
1931	679	12.00
1932	728	12.74
1933	748	12.63
1934	738	12.28
1935	710	11.87

The birth rate for England and Wales for 1935 was 14.7 per 1,000 population.

It would appear that the volitional limitation of families is caused by married couples desiring their restricted number of offspring to obtain the best possible advantages of upbringing and education. Some married couples are deliberately childless either because they wish to avail themselves to the fullest extent of the present greatly extended facilities for entertainment and enjoyment or simply because they cannot afford to have any children. Another point to be borne in mind is that with the present later ages at marriage the fertility of married couples has decreased. Economic factors play a big part in the reduction of a birth rate.

It may or may not be a good thing that fewer children have been born to occupy vacant places, so that each has more elbow room. It may or may not be true that the quality of human life has improved *pari passu* with the decline in quantity. But, subterfuges aside, we have to recognise that the birth rate is still declining generally. Whether the decline has gained such momentum that it cannot be overtaken is another and most opportune question; but a decline which has been steady and almost persistent all over the country for the last fifty years disposes one to the opinion that a further fall is inevitable unless further State aid in encouraging larger families is forthcoming. Further State aid does not mean simply increased maternity benefits and income-tax reliefs, but to these a further provision of maternity homes and nurseries and an improved midwifery service should be added.

If economic conditions do materially improve, the present trend makes it appear that a still higher standard of living will be demanded.

Deaths.—During the year 1,125 deaths were registered in the Borough. Of these deaths, 280 were of persons not usually resident in the Borough. By excluding these deaths of non-residents, the number of deaths is reduced to 845, to which must be added 52 deaths of Bury residents which have occurred in other districts. The number of Bury deaths is thus brought to 897, with a death rate of 15.00 per 1,000 population.

The death rate of 15.000 per 1,000 population returned for 1935 is fairly high. This was due to an increased number of elderly people over the age of 65 years dying from chest affections

such as bronchitis and pneumonia and from circulatory diseases. The first part of the long hard winter took toll of the old people. It was observed that after a period of frost and fog combined there was an almost immediate increase in the number of deaths of elderly people.

The following table gives the number of deaths and the death rates for the last twenty-five years:—

DEATH RATES, 1911-1935.

Year.	Number of Deaths.	Rate per 1,000 of Population.
1911	954	16.26
1912	838	14.18
1913	919	15.53
1914	964	16.28
1915	946	17.27
1916	902	16.87
1917	829	15.99
1918	976	19.13
1919	916	16.88
1920	821	14.55
1921	766	13.30
1922	857	14.93
1923	913	15.95
1924	833	14.66
1925	836	14.74
1926	729	12.82
1927	810	14.27
1928	791	13.90
1929	932	16.40
1930	762	13.41
1931	816	14.50
1932	770	13.47
1933	829	14.00
1934	855	14.22
1935 . . .	897	15.00

Infant Mortality.—The Infant Mortality Rate for the year was 66 per 1,000 births, and is next to the lowest recorded, which was 53 per 1,000 births in 1933. The corresponding rate for all England and Wales was 57 per 1,000 births, and for the great towns of England and Wales 62 per 1,000 births.

The following table shows the number of deaths of infants below one year of age and the rate per 1,000 births in Bury during the past twenty-five years:—

Year.	Number of deaths below one year of age.	Rate per 1,000 births.
1911 ...	200	168
1912 ...	138	112
1913 ...	168	141
1914 ...	146	125
1915 ...	118	115
Average for 5 years...	—	— 132
1916 ...	120	133
1917 ..	73	93
1918 ...	80	110
1919 ...	68	92
1920 ...	102	91
Average for 5 years...	—	— 104
1921 ...	93	85
1922 ...	78	82
1923 ...	88	101
1924 ...	63	71
1925 ...	63	80
Average for 5 years...	—	— 84
1926 ...	62	76
1927 ...	62	79
1928 ...	67	90
1929 ...	61	79
1930 ...	51	69
Average for 5 years.	—	— 78
1931 ...	48	71
1932 ...	62	85
1933 ...	40	53
1934 ...	62	84
1935 ...	47	66
Average for 5 years...	—	— 72

It will be seen from the above table that there is a progressive reduction of the Infantile Mortality Rate during the last twenty-five years, when five year periods are considered.

Put crudely death is merely the end product of unfavourable conditions of life. The reduction of a death rate then is an indication of improved living conditions. During the last quarter century much improvement has been effected in sanitation, in the control and prevention of infectious and fatal diseases, and in the purity of the food supply, including milk. Maternity and Child Welfare Clinics have been established throughout the country.

The cult of the open air has been developed, and there has been a higher standard of general education. All these factors have contributed towards a reduction of the Infantile Mortality Rate.

Other factors likely to produce a further reduction are improvement of housing conditions, an increase of hospital accommodation for infants who cannot properly be nursed at home, an extension of domiciliary medical attendance under the National Health Insurance, and the provision of a domiciliary nursing service, so that a trained nurse may be available for attendance in the home in connection with minor and major infantile maladies.

Infantile Mortality in Various Wards.

	Infant Deaths.	Births.	Deaths per 1000 Births.
Moorside Ward	16	176	100
East Ward	8	143	56
Church Ward	5	56	85
Redvales Ward	6	156	38
Elton Ward	12	165	72
Unsworth Ward	—	14	—
	—	—	—
Whole Borough... ..	47	710	66
	—	—	—

The table on page 23 shows the causes of death in the various age groups up to one year.

Uncertified Deaths.—Sixty-seven deaths were the subject of a coroner's enquiry, and 11 deaths were registered without being certified by a doctor or the coroner.

Causes of Death.—The causes of death classified according to age are shown in the table on page 22.

Heart disease and Cancer head the list of deaths. Heart disease accounted for 183 deaths, or 20.4 per cent. of the total deaths. Cancer accounted for 117 deaths, or 13.0 per cent. of the total deaths. Other Circulatory diseases came next with 69 deaths, bronchitis caused 67 deaths, and pneumonia caused 63 deaths. There was one death from that now uncommon disease Typhoid Fever.

CANCER.

During the last twenty-five years the number of deaths due to Cancer in Bury has about doubled. This is much in accordance with what has been found in other parts of the country for the same period, and may sound alarming if statistics are taken at their face value.

There are two facts to be borne in mind, however. Firstly the disease is being more accurately diagnosed at the present day, and more deaths are being ascribed to Cancer, whereas formerly they were being ascribed to other conditions when Cancer was probably present. Secondly, there is a bigger proportion of people living in the general population now who are over fifty years of age than before, and it is true that cancer manifests itself in persons over fifty years of age in the majority of cases. One is inclined to believe that the increase is more apparent than real.

Nevertheless Cancer remains mankind's sinister enemy. Sinister since it may take so many forms, some of which in their pre-cancerous stages slowly creep on the unsuspecting victims for some time unrecognised.

To-day, fortunately, many of these pre-cancerous conditions can be recognised, and if observed sufficiently early, CAN BE CURED.

Abnormalities of the breast, the womb, the mouth, the skin, and the rectum which give rise to obvious though slight signs and symptoms to the individual ought to be the subject for a doctor's investigation. Persistent stomach and intestinal troubles should never be neglected and a medical man's advice always sought, again no matter how slight the signs and symptoms are, if they are persistent there may be danger.

One does not wish to raise any false hopes, but certain cases where the conditions found to be frankly cancerous, that is found beyond the pre-cancerous stages, have and are being cured.

Cancer of the stomach and cancer of the intestines appear to have increased in Bury as elsewhere in the country during the latter years.

Although it has been stated that the disease as a rule manifests itself in persons over fifty years of age, the young are not exempt. In 1935 five cases between the ages of 35 and 40 years died of malignant disease.

Facilities are afforded at the Christie Hospital and Holt Radium Institute for the diagnosis and treatment of pre-cancerous and cancerous conditions. In certain cases where a person's income is insufficient to meet the fees incurred the local authority has power to defray part or whole of the expense.

At the Bury Corporation clinics a sharp look-out is made by the Medical Officers in order to note any pre-cancerous or cancerous conditions. The individuals in which they are found are advised as to the best course to obtain the appropriate treatment.

In the future Cancer may become a notifiable disease.

CANCER DEATH RATES, 1911-1935.

Year.	Number of Deaths.			Death Rates per 1,000 population.
	M.	F.	Total.	
1911	16	30	46	0.78
1912	15	27	42	0.71
1913	25	28	53	0.89
1914	22	47	69	1.16
1915	20	31	51	0.93
1916	30	34	64	1.19
1917	29	34	63	1.20
1918	33	33	66	1.21
1919	28	38	66	1.21
1920	35	36	71	1.26
1921	36	39	75	1.30
1922	42	47	89	1.55
1923	41	44	85	1.48
1924	46	52	98	1.72
1925	37	54	91	1.60
1926	41	27	68	1.20
1927	32	45	77	1.35
1928	34	51	85	1.49
1929	48	49	97	1.71
1930	38	44	82	1.44
1931	42	47	89	1.58
1932	45	48	93	1.63
1933	51	62	113	1.91
1934	38	56	94	1.56
1935	59	58	117	1.95

The following table shows the age and sex distribution of all persons who were certified as having died of cancer in 1935. The table shows also the localisation of the disease.

DEATHS FROM CANCER, 1935.

Age and Sex Distribution and Localisation of Disease.

Lesion.	Sex		AGE																	
			0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85 and upwards
	M.	F.	to 5	to 10	to 15	to 20	to 25	to 30	to 35	to 40	to 45	to 50	to 55	to 60	to 65	to 70	to 75	to 80	to 85	85 and upwards
Buccal Cavity ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fauces ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mouth ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pharynx ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tongue ...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	...	...	...
Tonsil ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Sites ...	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...
Total Buccal Cavity ...	5	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	2	...	...	...
Digestive Organs ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gall Bladder ...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Intestines ...	11	...	...	...	...	...	...	...	...	...	...	1	...	1	2	2	4	...	1	...
Liver ...	3	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...	...
Œsophagus ...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...
Pancreas... ..	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Rectum ...	9	...	...	...	...	...	...	...	...	...	...	1	1	2	...	3	1	1	...	...
Stomach ...	16	...	...	...	...	...	...	...	...	1	...	2	...	4	3	3	2	1	...	...
Total Digestive Organs ...	42	...	...	...	...	...	...	...	...	1	...	4	2	7	7	10	8	2	1	...
	...	33	...	...	...	...	...	...	...	1	...	...	3	8	5	6	3	4	2	1

DEATHS FROM CANCER, 1935—*continued.*

Lesion.	Sex		AGE																	
	M.	F.	0 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 65	65 to 70	70 to 75	75 to 80	80 to 85	85 and upwards
Respiratory Organs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Larynx ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lung ...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...
Mediastinum ...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Total Respiratory Organs	3	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	...	...
Female Genital Organs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uterus ...	...	8	...	...	...	...	...	...	...	1	...	...	...	2	...	2	1	1	1	...
Ovary ...	...	7	...	...	...	...	...	...	...	...	...	1	1	1	2	1	1	...	...	...
Total Female Genital Organs	...	15	...	...	...	...	...	...	...	1	...	1	1	3	2	3	2	1	1	...
Breast ...	...	6	...	...	...	...	...	...	...	1	...	1	1	...	2	...	1	...	...	...
Male Genito-urinary Organs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bladder ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Kidney ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Prostate ...	2	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...
Scrotum ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Male Genito-urinary Organs	3	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...
Skin ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other or Unspecified Organs	6	...	...	1	...	...	...	...	...	...	...	...	1	2	...	...	2	...	...	...
	...	2	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...
Total Males...	59	...	...	1	...	...	...	...	...	1	...	5	4	10	10	11	14	2	1	...
Total Females	...	58	...	...	...	...	...	...	...	3	2	2	5	11	9	9	7	6	3	1
TOTAL both Sexes	117	...	...	1	...	...	...	...	...	4	2	7	9	21	19	20	21	8	4	1

I would like to draw attention to the following facts :—

PREVENTION.

Statistics prove that the average Cancer patient obtains medical advice too late. One should learn how to recognise its principal danger signals, and immediately seek medical advice upon the first suspicion that the disease may be present. The following preventive points are of general interest :—

- (1) If you see or feel a small lump on your body consult your doctor at once.
- (2) Avoid chronic irritation, e.g., excessive smoking, jagged teeth, ill-fitting false teeth, and the practice of drinking fluids at high temperatures. The hot stem of a pipe may cause irritation of tongue or/and lip.
- (3) If you notice unusual discharges or bleeding from the openings of the body consult your doctor at once.
- (4) Consult your doctor re Chronic Indigestion.
- (5) Remember the importance of the time factor (early treatment) in Cancer.
- (6) Remember there may be no pain in the early stages. If the early stages of Cancer were as painful as toothache many lives would be saved.
- (7) Cancer frequently develops in the region of a chronic ulcer (e.g., on lip or tongue), and it is important to see that such ulcers are properly cured.

So far as we know Cancer is neither infectious, contagious, a germ disease, nor hereditary; but it would be unwise to be dogmatic about any of these points.

Causes of, and Ages at Death during the Year 1935.

Causes of Death.	Nett Deaths at the subjoined Ages of Residents, whether occurring within or without the District.									Total Deaths whether of Residents or Non-residents in Institutions in the District.
	All ages.	Under 1 year.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and upwards.	
All Causes { Certified	886	46	2	14	20	20	72	297	415	553
{ Uncertified ..	11	1	1	..	..	1	..	3	5	..
Enteric Fever	1	..	..	..	..	..	..	1	..	1
Measles	3	1	1	1	..	..	..	..	..	..
Scarlet Fever.....	..	..	..	..	..	..	..	..	..	3
Whooping Cough .....	..	..	..	..	..	..	..	..	..	..
Diphtheria	8	..	..	4	4	..	..	..	..	13
Influenza	17	..	..	..	..	2	4	9	2	2
Encephalitis Lethargica..	..	..	..	..	..	..	..	..	..	3
Cerebro-Spinal Fever ....	..	..	..	..	..	..	..	..	..	1
Tuberculosis of Respirat'ry System	29	..	..	..	..	5	9	10	5	9
Other Tuberculous Diseases	9	..	..	1	3	2	1	2	..	3
Syphilis	1	..	..	..	..	..	1	..	..	1
General Paralysis of the Insane, Tabes Dorsalis..	1	..	..	..	..	..	1	..	..	..
Cancer, Malignant Disease	117	..	..	..	1	..	6	56	54	62
Diabetes	7	..	..	..	..	..	..	2	5	2
Cerebral Hæmorrhage....	54	..	..	..	..	..	1	19	34	39
Heart Disease	183	..	..	..	..	3	11	60	109	123
Aneurysm	1	..	..	..	..	..	..	..	1	1
Other circulatory Diseases	69	..	..	..	..	..	..	14	55	28
Bronchitis	67	4	..	..	..	1	1	23	38	16
Pneumonia (all forms) ..	63	8	..	1	..	1	12	22	19	34
Other Respir'tory Diseases	4	..	..	..	..	..	..	..	4	12
Peptic Ulcer	11	..	..	..	..	..	..	7	4	9
Diarrhœa, &c.	2	1	..	1	..	..	..	..	..	..
Appendicitis	7	..	..	..	2	..	2	3	..	14
Cirrhosis of Liver.....	5	..	..	..	..	..	..	2	3	2
Other Diseases of Liver, etc	8	..	..	..	..	..	..	4	4	..
Other Digestive Diseases..	19	1	1	2	..	1	2	7	5	8
Acute & Chronic Nephritis	29	..	..	..	..	1	3	13	12	20
Puerperal Sepsis	2	..	..	..	..	1	1	..	..	4
Other Puerperal Causes....	3	..	..	..	..	..	3	..	..	4
Congenital Debility and Malformation, including Premature Birth	28	28	..	..	..	..	..	..	..	20
Senility	24	..	..	..	..	..	..	1	23	18
Suicides	12	..	..	..	..	..	3	7	2	7
Other Deaths from Viol'nce	36	1	1	2	7	2	..	12	11	52
Other Defined Causes	67	3	..	2	3	2	11	23	23	42
Causes Ill-defined or Unknown	10	..	..	..	..	..	..	3	7	..
	897	47	3	14	20	21	72	300	420	553

INFANT MORTALITY, 1935.

Nett Deaths from stated causes at various Ages under
One Year of Age.

CAUSE OF DEATH.		Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 1 month	1-3 Months.	3-6 Months.	6-9 Months.	9-12 Months.	Total Deaths under 1 year.
All Causes	Certified	14	5	1	6	26	5	6	6	3	46
	Uncertified	1	..	..	..	1	..	..	..	..	1
Smallpox.....		..	..	..	..	..	..	..	..	..	..
Chicken-pox .....		..	..	..	..	..	..	..	..	..	..
Measles .....		..	..	..	..	..	..	..	..	1	1
Scarlet Fever.....		..	..	..	..	..	..	..	..	..	..
Whooping Cough .....		..	..	..	..	..	..	..	..	..	..
Diphtheria .....		..	..	..	..	..	..	..	..	..	..
Tuberculous Meningitis .....		..	..	..	..	..	..	..	..	..	..
Abdominal Tuberculosis.....		..	..	..	..	..	..	..	..	..	..
Other Tuberculous Diseases .....		..	..	..	..	..	..	..	..	..	..
Meningitis (not Tuberculous)....		..	..	..	..	..	1	..	..	..	1
Convulsions		2	..	..	..	2	..	..	..	..	2
Laryngitis .....		..	..	..	..	..	..	..	..	..	..
Bronchitis .....		..	..	1	..	1	..	1	1	1	4
Pneumonia (all forms) .....		..	..	..	1	1	..	2	4	1	8
Diarrhoea and Enteritis .....		..	..	..	..	..	1	..	..	..	1
Gastritis .....		..	..	..	..	..	..	..	..	..	..
Syphilis .....		..	..	..	..	..	..	..	..	..	..
Rickets .....		..	..	..	..	..	..	..	..	..	..
Suffocation, overlying .....		..	..	..	..	..	..	1	..	..	1
Injury at Birth		2	..	..	..	2	..	..	..	..	2
Atelectasis .....		..	..	..	..	..	..	..	..	..	..
Congenital Malformations		1	1	..	..	2	..	1	..	..	3
Premature Birth		8	2	..	1	11	1	1	..	..	13
Atrophy, Debility & Marasmus..		2	2	..	1	5	..	..	..	..	5
Other Causes .....		..	..	..	3	3	2	..	1	..	6
		15	5	1	6	27	5	6	6	3	47

Nett Births in the year { Legitimate.. 677
 { Illegitimate.. 33

Nett Deaths in the year	{ Legitimate Infants ..	45
	{ Illegitimate Infants ..	2

Vital Statistics of Whole District during 1935 and Previous Years.

YEAR	Population estimated to middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.		Transfer-able Deaths of Non-residents registered in the District.	Transfer-able Deaths of Residents not registered in the District.	NETT DEATHS BELONGING TO THE DISTRICT.			
		Nett.		DISTRICT.				Under 1 Year of Age.		At all Ages.	
		Number.	Rate	Number	Rate			Number.	Rate per 1000 nett Births.	Number	Rate.
1929	56830	776	13.59	1117	19.65	245	60	61	79	932	16.40
1930	56830	735	12.87	952	16.75	245	55	51	69	762	13.41
1931	56260	679	12.00	948	16.85	170	38	48	71	816	14.50
1932	57160	728	12.74	984	17.49	260	46	62	85	770	13.47
1933	59200	748	12.63	1031	17.42	248	46	40	53	829	14.00
1934	60100	738	12.28	1047	17.42	245	53	62	84	855	14.22
1935	59800	710	11.87	1125	18.81	280	52	47	66	897	15.00

Area of District in acres (land and inland water)

Total population at all ages 56,182

Total families or separate occupiers 15,402

Average number of persons per house..... 3.71

At Census of 1931.

SECTION 2.

General Provision of Health
Services in the Area.

GENERAL PROVISION OF HEALTH SERVICES IN THE AREA.

(I.) **Public Health Officers of the Authority.**—A list of these will be found on page 6 of the report.

(II.) **Laboratory Facilities.**—These are provided at the Broadfield Clinical Laboratory, Rochdale, and the work is performed by Dr. J. S. Pooley. Particulars of the examinations performed in 1935 are given on page 86 of this report. More detailed examinations—Wasserman reaction tests, biological tests, and examinations of water are performed at the Public Health Laboratory, Manchester.

At the Bury Venereal Disease Clinic, new laboratory facilities have been afforded, so that many more specimens of infective organisms, etc., have been examined than formerly.

Chemical investigations were made in the cases of milk and foodstuffs by the Borough Analyst, Mr. T. R. Hodgson.

(III.) **Ambulance Facilities.**

(a) For Infectious Cases.—There are two motor ambulances owned by the Bury Joint Hospitals Board for the transport of cases of infectious disease and tuberculosis.

(b) For Non-infectious and Accident Cases.—The Bury Corporation provides three motor ambulances for the removal of accident cases and cases of illnesses requiring hospital treatment.

(IV.) **Nursing in the Home.**—Home Nursing is not provided directly by the Council, but is carried out by the Bury Branch of the Queen Victoria's Jubilee Institute for Nurses. An arrangement has been entered into whereby, at the request of the Medical Officer of Health, one of the Association's Nurses visits and treats cases of Puerperal Fever, Puerperal Pyrexia, Ophthalmia Neonatorum, Measles and German Measles, Whooping Cough, Epidemic Diarrhœa, and Poliomyelitis. The charge to the Council for this visiting is as follows:—For cases of Puerperal Fever, Puerperal Pyrexia, and Ophthalmia Neonatorum, 1s. 6d. per visit; for cases of Whooping Cough, Epidemic Diarrhœa and Poliomyelitis, 6d. per visit; and for cases of Measles and German Measles £1 1s. per case.

(V.) **Clinics and Treatment Centres.**—Table A gives a list of clinics and treatment centres during 1934, and Table B gives a list of clinics and treatment centres available from the 1st April, 1935 :—

TABLE A.**Clinics and Treatment Centres.**

The following is a list of clinics and treatment centres available for Bury patients during 1934 :—

Name and Situation.	Times of attendance.	By whom Provided.
Maternity and Child Welfare Centres:		
(a) Welfare Centre, The Wylde	Monday and Thursday, 2-30 p.m. to 4-30 p.m.	Health Committee of Local Authority
(b) Wood Street School, Elton	Wednesday, 2-30 p.m. to 4-30 p.m.	" " "
Ante-Natal Clinic at Welfare Centre, The Wylde	Alternate Wednesdays, 2-30 p.m. to 4-30 p.m.	" " "
School Clinics:		
(a) Minor Ailments Clinic, The Wylde...	Monday to Saturday, 9-0 a.m. to 10-0 a.m.	Education Committee of Local Authority
(b) Dental Clinic, The Wylde	Monday to Friday, 9-30 a.m. to 12 noon, 2-0 p.m. to 5-0 p.m. (except during Dental Inspection in Schools). Saturday, 9-30 to 12-0 noon. Thursday, 2-30 p.m.	" " "
(c) Ophthalmic Clinic, The Wylde... ..		" " "
Tuberculosis Clinics:		
Tuberculosis Dispensary, The Wylde ...	Tuesday and Thursday, 10-0 a.m. to 11 a.m., Wednesday, 6-45 p.m. to 7-45 p.m. when necessary.	Health Committee of Local Authority
Venereal Disease Clinic:		
The Wylde	Females: Tuesday, 6-30 to 8-30 p.m. Males: Friday, 6-30 to 8-30 p.m.	" " "
	Irrigation, Males only: Monday to Friday, 6-30 to 8-30 p.m., except Tuesday, 8-30 to 9-30 p.m.	" " "
Orthopædic Clinic:		
School Clinic, Whitefield	Thursday mornings.	Health and Education Committees of Local Authority by arrangement with the Lancashire County Council.

Clinics and Treatment Centres.

TABLE B.

The following is a list of clinics and treatment centres available for Bury patients during 1935:—

Name and Situation.	Times of Attendance.	By whom Provided.
Maternity and Child Welfare Centres :		
(a) Welfare Centre, The Wylde... ..	Monday and Thursday, 2-0 p.m. to 5-0 p.m., Friday 10-0 a.m. to 12-30 p.m.	Health Committee of Local Authority
(b) Wood Street School, Elton	Wednesday, 2-0 p.m. to 5-0 p.m.	„ „ „ „
Ante-Natal and Post-Natal Clinics		
(a) Welfare Centre, The Wylde	Wednesday, 10-0 a.m. to 12-30 p.m.	„ „ „ „
(b) Wood Street School, Elton	Friday, 2-0 to 5-0 p.m.	„ „ „ „
School Clinics :		
(a) Minor Ailments Clinic, The Wylde.....	Monday to Saturday, 9-0 a.m. to 10-0 a.m.	Education Committee of Local Authority
(b) Dental Clinic, The Wylde	Monday to Friday, 9-30 a.m. to 12 noon, 2-0 p.m. to 5-0 p.m. (except during Dental Inspection in Schools). Saturday, 9-30 to 12-0 noon. Thursday, 2-30 p.m.	„ „ „ „
(c) Ophthalmic Clinic, The Wylde		„ „ „ „
Tuberculosis Clinics :		
Tuberculosis Dispensary, The Wylde	Tuesday and Thursday, 10-0 a.m. to 12-30 p.m., Wednesday, 6-45 p.m. to 7-45 p.m. when necessary.	Health Committee of Local Authority

Name and Situation.			Times of Attendance	By whom Provided.
Venereal Disease Clinic :				
The Wylde	...	...	<p>Females : Tuesday, 6-30 to 8-30 p.m., Thursday, 2-0 to 5-0 p.m., Friday, 8-30 to 9-30 p.m.</p> <p>Males : Tuesday, 8-30 to 9-30 p.m., Friday, 6-30 to 8-30 p.m., Saturday, 10-0 a.m. to 1-0 p.m.</p> <p>Irrigation, Males : Monday to Friday, 6-30 to 8-30 p.m. except Tuesday, 8-30 to 9-30 p.m., Saturday, 10-0 a.m. to 1-0 p.m.</p> <p>Females : Monday, Wednesday and Saturday, 9-15 to 10-15 a.m., Tuesday, 6-30 to 8-30 p.m., Thursday, 2-0 to 5-0 p.m.</p>	Health Committee of Local Authority
Artificial Light Clinic, The Wylde :				Health and Education Committees of Local Authority
(a) for School Children	...	...	Monday, 9-30 a.m. to 12-30 p.m.	" "
(b) for Maternity and Child Welfare Cases			Wednesday, 9-30 a.m. to 12-30 p.m.	" "
(c) for Tuberculosis Cases	...	...	Thursday, 9-30 a.m. to 12-30 p.m.	" "
Immunisation Clinic, The Wylde :				
(a) for School Children	...	...	Wednesday, 2-0 to 4-30 p.m.	" "
(b) for Pre-School Children	...	...	Monday, 9-30 a.m. to 12-30 p.m.	" "
Orthopædic Clinic :				Health and Education Committees of Local Authority by arrangement with the Lancashire County Council.
School Clinic, Whitefield	...	...	Thursday mornings.	

(VI.) Hospitals, Public and Voluntary.

The following is a list of hospitals used by inhabitants of Bury:—

Name and Situation.	Type.	No. of Available Beds.	Management.	Proportion of beds used by persons from Outside Bury Area.
(a) Within the Borough:				
Florence Nightingale Hospital, Bury.	Isolation ...	96	Bury & District Joint Hospital Board.	Approx. 40%.
Bury Infirmary, Bury.	General ...	150	Voluntary	Approx. 50%.
Jericho Institution Bury.	General ...	780	Public Assist'n'e Committee of Lancashire County Council	Approx. 50%.
(b) Outside the Borough:				
Aitken Sanatorium, Holcombe, near Bury.	Tuberculosis Sanatorium.	70	Bury & District Joint Hospital Board.	72% by Lanc'shire County Council Cases.
Ainsworth Smallpox Hospital, Ainsworth, near Bolton.	Smallpox ...	28	do.	Cases admitted as required.

In addition to the above, patients from Bury are admitted to Manchester institutions, principally: Manchester Royal Infirmary (General Medical and Surgical), Manchester and Salford Skin Hospital (Skin Cases), and St. Mary's Hospital (Maternity).

(VII.) Local Government Act, 1929.—The Jericho Institution of the late Board of Guardians has not been transferred to the Public Health Committee. It is administered by the Public Assistance Committee of the Lancashire County Council. Accommodation is available for the sick inhabitants of the area, as before.

(VIII.) Poor Law Medical Out-Relief.—The arrangements in operation for the provision of medical assistance to those in poor circumstances remain unchanged. Particulars of the two areas in which the Borough is divided for this service, the names of the

Medical Officers in charge, and a summary of the attendances made are shown below :—

Poor Law Medical Out-Relief during the Year 1935.

Area	Medical Officers.	Attendance at patients own houses.	Attendances at Surgery or M.O.'s house.	Medicine supplied without seeing patient.	Attendances at patients' houses and medicine supplied.	Attendances at Surgery and medicine.	Total.
No. 1...	Dr. H. Smith ...	42	107	117	15	2	283
No. 2...	Dr. C. G. Lees...	229	61	90	99	70	549

(IX.) **Institutional Provision for the Care of Mental Defectives.**—The Lancashire Mental Hospitals Board, of which the Bury Council is a member, deals with the Lunacy and Mental Deficiency Services.

(X) **Legislation in Force.**

The following local Acts, general acts adopted, and Byelaws relating to the public health are in force :—

LOCAL ACTS.

Bury Corporation Act, 1909.

Bury Corporation Act, 1927.

Bury Corporation Act, 1932.

ACTS ADOPTED.

Public Health Acts Amendment Act, 1890. (March 5th, 1891; came into operation May 1st, 1891.)

Infectious Diseases (Prevention) Act, 1890. (August 2nd, 1900; came into operation October 1st, 1900.)

Housing of the Working Classes Act, 1890—Part III. (June 3rd, 1909.)

Notification of Births Act, 1907. (March 5th, 1908.)

Public Health Acts Amendment Act, 1907. Orders made, declaring certain Parts and Sections thereof to be in force in the Borough, by the Local Government Board on November 8th, 1909 (came into operation 1st January, 1910), and by the Secretary of State on October 13th, 1909.

Public Health Act, 1925. Certain sections thereof adopted on the 7th January, 1926, to come into operation on the 1st March, 1926.

Baths and Washhouses Acts, 1846 to 1899, adopted 4th February, 1926.

BYE-LAWS.

Date came into force.

Common Lodging-houses 7th July, 1881.

Houses Let-in-Lodgings... .. 24th September, 1898.

Abattoirs... .. 5th October, 1916.

Offensive Trades 6th February, 1929.

SECTION 3.

**Sanitary Circumstances of the
Area.**

Housing.

**Inspection and Supervision of
Food.**

**Production and Distribution of
Milk.**

**SANITARY CIRCUMSTANCES AND SANITARY
INSPECTION OF THE AREA.**

REPORT OF THE CHIEF SANITARY INSPECTOR.

To the Medical Officer of Health
for the County Borough of Bury.

I beg to submit to you, in accordance with Article 27 of the Sanitary Officers (Outside London) Regulations, 1935, my Report on the Sanitary inspection of the Area for the year 1935.

General Observations.

During the year under review the work of the Sanitary Inspector's Department has been directed towards establishing the system of sanitary inspection which was outlined in the Report for 1934.

In the re-organisation which took place at that time considerable extension of the duties of this department was effected. Coincident with the taking over of duties formerly carried out by other Departments of the Corporation there has been a further increase in the duties due to the issue of new legislation during this period.

One of the primary duties has been to establish a correct record in all the registers now required to be kept in this Department. In order to effect this efficiently and with economy the town is divided into five sanitary districts with one inspector to each district. In this manner routine inspection work has been established uniformly in all parts of the Borough.

In addition, the Housing Programme passed by the Council has called for increased activity in the inspection of dwelling-houses for clearance area procedure.

Staff.

During the year several changes occurred in the staff of the Department.

In May, 1935, two additional Sanitary Inspectors were appointed: Mr. F. Shacklock, of Stoke-on-Trent, and Mr. C. H. Wright, of Sunderland.

In August, 1935, Mr. A. J. Masi, of Todmorden, was appointed to fill the vacancy caused by the death of Mr. Haworth.

Water Supply.

During the year 3 samples of water were submitted for chemical analysis, and one of these was also examined for its bacteriological condition.

All the samples were found to be unsatisfactory.

Sample No. W.1 was obtained from a shallow well which was intended to be used for the domestic supply at a proposed new dwelling house. The building was not proceeded with following the unsatisfactory report on the water supply.

Sample No. W.2 was obtained from a mill reservoir which provided the domestic water supply to an adjacent cottage.

Sample No. W.3 was obtained from the same supply as No. W.2, and was taken at the water tap at the cottage. Following a notice to the owners of the cottage, arrangements were made to lay on a constant supply from the town's mains, and this was carried out satisfactorily.

Drainage and Sewerage.

A considerable amount of new drainage work and reconstruction of old drainage due to the conversion of privy closets and waste water closets to the fresh water carriage system was carried out during the year.

The new sewer which was constructed at Hollins enabled all the privy middens on the south side of Hollins Lane to be converted.

In each case the house drainage was reconstructed and connected to the new sewer. The following summary shows the work done during the year:—

	Primary Visit.	Re-visit.	Total.
Drainage inspected	482	108	590
Drainage defective... ..	66	13	79
Drainage reconstructed	89	6	95
Cesspools	4	5	9
Sewers and street gullies... ..	16	1	17
Totals	657	133	790

Closet Accommodation.

The construction of the new sewer at Hollins enabled the largest single scheme of conversions during the year.

In all cases of conversion of privy middens, pail closet or waste water closet to the fresh water carriage system, the Corporation undertake to provide, free of charge, a set of fittings (closet pedestal and cistern complete) when the owner complies with the first informal notice of the Department.

A commencement has been made with a scheme for the conversion to pail closets of all the privy middens situated at dairy farms. In this way a regular weekly collection of this refuse can then be arranged for by the Cleansing Department.

The following table shows the Type and Number of Conveniences in the Borough at the 31st December, 1935:—

Number of Dwelling-houses	18364
„ Factories	240
„ Workshops and Lock-up Shops	472
„ Public Institutions and Places	132
„ Water Closets	17275
„ Waste Water Closets	2740
„ Privy Closets	545
„ Pail Closets	244
„ Tank Closets	4
„ Dry Ashpits	2392
„ Ashbins	12498

Table giving particulars of the Conversions during the past Five years.

	1931	1932	1933	1934	1935
Privy closets cleared away	4	2	—	2	—
Pail closets cleared away	—	—	—	—	1
Privy closets converted to fresh-water closets ...	—	25	66	8	53
Pail closets converted to fresh-water closets ...	8	2	—	16	1
Additional fresh-water closets provided	36	36	72	53	21
Waste-water closets replaced by fresh-water closets	32	27	32	44	38
„ „ cleared away	—	—	—	17	—
Trough „ replaced by fresh-water closets	—	—	—	—	—
Total number of fresh-water closets fixed in connection with old property	76	90	170	121	108
Privy middens altered and converted to dry ashpits	—	—	—	—	—
„ „ „ ashbins	—	13	34	5	53
Dry ashpits „ „ ashbins	20	19	32	27	2
Number of ashbins provided (galvanised iron) fixed	—	—	—	—	—
„ „ „ „ portable	55	73	171	115	105
Number of cesspools cleared out	3	—	—	—	—

Storage of Household Refuse.

There still remains a large number of dry ashpits in the district. It is usual for a portable galvanised iron ashbin to be provided by the owner when a closet conversion is carried out.

The following table shows the detail of this work during 1935 :

Number of ashpits abolished	2
„ ashbins substituted	5
„ additional ashbins provided	45
„ privy midden ashpits abolished... ..	53
„ ashbins substituted	53

A special report was submitted to the Health Committee during the year suggesting a scheme to abolish ashpits and to provide instead a portable galvanised iron ashbin for each house in the district.

Consideration is being given to this matter in preparation for the financial estimates of the coming year 1936-37.

SANITARY INSPECTION OF THE DISTRICT.

1. Number and Nature of Inspections.

During the year 1935 the following inspections were made by the sanitary staff to the premises detailed:—

Nature of Inspection.	Primary Insp's.	Re-ins- pections.	Total Visits.
Houses under Public Health Acts	1,275	1,765	3,040
Overcrowding	20	—	20
Water Supply	10	2	12
Tents, Vans, Sheds	15	—	15
Houses Let in Lodgings	71	16	87
Common Lodging Houses	163	2	165
Schools	31	6	37
Entertainment Houses	6	3	9
Ashes Accommodation	309	160	469
Accumulations... ..	43	14	57
Animals or Birds	7	3	10
Stable Premises	51	4	55
Yards, Courts, etc.	51	2	53
Piggeries	24	3	27
Drainage—Testing	14	—	14
Inspected	482	108	590
Defective	66	13	79
Reconstructed	89	6	95
Closets—Water	385	18	403
Pails or Privies	188	12	200
Cesspools	4	5	9
Urinals... ..	106	11	117
Sewers and Street Gullies... ..	16	1	17
Cowsheds	122	10	132
Milkshops and Dairies	123	8	131
Ice-Cream Premises	33	13	46
Meat Shops for Meat Inspection	23	—	23
Abattoir for Meat Inspection	66	—	66
Food Preparing Premises	253	68	321
General Food Premises, including Markets ...	204	12	216
Cold Stores	2	—	2
Merchandise Marks Acts	5,108	—	5,108
Fertilisers and Feeding Stuffs Act... ..	2	—	2
Offensive Trades... ..	22	4	26
Marine Stores	18	—	18
Knackers' Yard... ..	7	—	7
Factories... ..	48	10	58
Workshops	47	15	62
Bakehouses—Factory	19	14	33
Non-Factory	94	78	172
Outworkers	2	—	2
Petrol	42	7	49
Shops Acts	57	—	57
Infectious Diseases	392	49	441
Disinfection	450	6	456
Smoke Abatement Observations	328	—	328
Premises Visited	18	2	20
Rivers Pollution Acts	12	—	12
Miscellaneous Visits	315	1	316
Interview—Owners, Tradesmen, etc.	248	—	248
Verminous Premises	207	40	247
Samples—Food and Drugs	251	—	251
Rag Flock	2	—	2
Water	4	—	4
Other	1	—	1
Milk—Bacteriological	44	—	44
Housing inspections under the Regulations of 1925 and 1932	1,140	—	1,140
	13,130	2,491	15,621

2. Number of Notices Served.

To secure the abatement of nuisances and the removal of conditions dangerous to health, the following action was taken :—

Number of informal notices served... ..	665
,, informal notices complied with ...	514
,, statutory notices served	76
,, statutory notices complied with	41

3. Complaints Received.

During the year 438 complaints were received relating to the following matters :—

Nature of complaint.	Number.
General repairs	57
Privies and pail closets	20
Water closets	21
Drains choked and defective	28
Ashbins defective	136
Ashpits	15
Foul and obnoxious odours... ..	23
Dampness	31
Smoke	14
Accumulations	17
Overcrowding	4
Roof defective	21
Vermin	44
Animals or birds	2
Dirty tenants	2
Water supply	1
Dangerous buildings	2

Each complaint was investigated and any necessary action taken.

Many notices of complaint were received from informants who preferred to remain anonymous. These were all duly inquired into in the usual way, notices being served as found necessary.

4. Record of Nuisances Abated and Work Done.

During the year the total number of nuisances abated or work done, either as a result of informal or statutory action, is as follows :—

1. As a result of informal notice	1,745
2. As a result of statutory notice	51
	—
Total	1,796
	—

Houses Let in Lodgings.

Bye-Laws dated 1898.

At the end of 1935 there were 27 registered houses let in lodgings in the Borough.

The general conditions found to be existing in these houses were unsatisfactory, and a detailed survey of each house is being carried out under the provisions of the Bye-Laws. During the year three registered houses were demolished in the course of site clearance for new building operations.

Particulars of Registered Houses Let in Lodgings and work done in 1935 :—

No. of houses.	No. of rooms.	Accommodation available for	
		adults.	children.
27	173	212	38
Number of Notices served under Bye-Laws and Public Health Acts... ..			
			10
Number of defects found... ..			86
,, defects remedied			27
,, visits of inspection			87

One registered house was brought up to Bye-Law standard as a result of notices served.

Common Lodging Houses.

- Bye-Laws under Section 80. Public Health Act, 1875.*
- Bury Corporation Act, 1909. Section 188.*
- Bury Corporation Act, 1932. Sections 172 to 174.*

There are six registered common lodging-houses in the Borough. In the Report for the year 1934 it was stated that these premises had been surveyed under the provisions of the Bye-Laws for Common Lodging Houses, and as a result one house (registered for 19 beds) has been struck off the Register and the remainder have been repaired and renovated in accordance with the notices served after the completion of the survey.

The accommodation available is as follows:—

Situation.	No. of Beds.	Accommodation available for:—
1. 24, Clerke Street	34	Males only.
2. 5, 7, 9 and 11, Clerke Street.	54	Males only.
3. 125, Princess Street	13	Males only.
4. 26 and 28, Clerke Street ...	72	Males and females.
5. 138, Princess Street	19	Males only.
6. 56, Union Square... ..	16	Males only.
Total number of beds	208	

It is found that the number of persons who are now living in common lodging-houses is less than was formerly the case. The reason advanced for this decline in the number of occupants is to the effect that benefit may not be had from the Public Assistance Committee unless the recipient is occupying a house or furnished rooms. The average number of persons found to be occupying these premises during the year is about 70. Thus there is about two-thirds of the available accommodation standing vacant during the greater part of the year. The number of casuals received at these houses has also decreased.

Tents, Vans, and Sheds.

Public Health Act, 1875.

Housing of the Working Classes Act, 1885.

Public Health Act, 1925.

Bury Corporation Act, 1932.

There are no inhabited tents, vans, or sheds in the Borough. During the year it was necessary to give verbal notice on two occasions to caravan dwellers who removed their caravans outside the Borough within 24 hours of receiving notice.

Canal Boats.

Canal Boats Acts, 1877 and 1884.

Canal Boats Regulations.

No registered canal boats came into the wharf at Bury Bridge during 1935.

This canal is now used almost solely by open coal carrying boats, which are not subject to registration.

Rats and Mice.

Rats and Mice (Destruction) Act, 1919.

The Cleansing Superintendent is the officer appointed under the Act, and he supervises the activities of the Official Rat Catcher.

During the year four houses and shops were rat proofed, drains repaired and reconstructed, and the houses cleared of a serious rat infestation as a result of notices served under the Public Health Acts by this Department.

Offensive Trades.

Public Health Acts, 1875 and 1925.

Number of Premises on the Register 1st January, 1935 ... 18

Number of Premises on the Register 31st December, 1935... 18

Workshops 8

Factories 10

Notices served... .. 4

Notices complied with 1

Number of inspections 51

List and classification of registered trades :—

Fellmongers, Tanners, and Leatherdressers 6

Tallow melters, Fat melters and Extractors 2

Knackers' Yard 1

Tripe boilers 2

Glue makers 1

Gut scrapers 1

Rag and bone dealers... .. 5

—

18

—

During the year structural improvements were carried out at the knackers' yard, as a result of representations from the Department.

The premises in all cases are maintained in compliance with the provisions of the Bye-Laws which are applicable to the particular trade carried on.

Smoke Abatement.

Public Health Act, 1875.

Public Health (Smoke Abatement) Act, 1926.

There are 90 factory chimneys in the district, and the greater part of these are situated at the larger manufacturing premises. In addition there are about 18,300 domestic chimneys, most of them continuously contributing their quota towards the problem of atmospheric pollution. The majority of the factory chimneys are subject to strict legal limitations in the emission of black smoke, whereas emissions of smoke from domestic chimneys are not amenable to law. The solution to the pollution due to domestic fires appears to be the provision of suitable smokeless heating apparatus instead of the open coal fire. The Corporation Electricity and Gas Departments are pursuing this subject in a very practical manner, the results of which will be of great benefit to the community, if the public give them adequate support.

The time limit approved by the Council for the emission of black smoke is two minutes in the aggregate for a continuous period of 30 minutes.

Particulars of observations and work done during 1935 :—

Number of 30 minute observations	328
---	-----

Number of premises visited	20
-----------------------------------	----

N.B.—One observation was taken of a chimney which is exempt under Section 1 (e) Public Health (Smoke Abatement) Act, 1928.

Classification of all Observations taken.

TABLE I.

Premises.	Dense Black Smoke.	Moderate Smoke.	Little or no Smoke.
Factories	186.25 min.	4114 min.	5509.75 min.
Exempted works	6. min.	24 min.	
Average per observation of factories.	.570 min.	12.582.	16.848.

Number of nuisances due to excessive black smoke... ..	10
„ statutory notices served	6
„ statutory notices complied with	6
„ intimations to adjoining Local Authorities of smoke nuisances arising in their districts...	3

Particulars of Smoke Nuisances reported.

TABLE II.

No. in Smoke Register.	Period of emission in minutes.		
	Black Smoke.	Moderate Smoke.	Little or no Smoke.
1. No. 2	3	11	16
2. No. 21	5.5	10.5	14
3. No. 32	12.5	17.5	—
4. No. 53	7.5	5.0	17.5
5. No. 53	3	6.25	20.75
6. No. 62	7.5	12.0	10.5
7. No. 62.	7	18	5
8. No. 62.	5	21	4
9. No. 62.	6.5	16	7.5
10. No. 88	5.5	9	15.5

Complaints were received on three occasions of smoke nuisance arising outside the Borough. In each case observations were taken and the results forwarded to the Local Authority

concerned. Four observations were taken, in which the limit for the emission of black smoke was reached, but was not exceeded. In each case a verbal notice of the observation was given by the inspector concerned, to the person in charge of the plant.

Six firms were responsible for ten nuisances reported. In each case the nuisance was abated, after alterations to plant had been effected or improvements made in the methods of firing.

In one case excessive smoke was due to defects occurring in new automatic stoking appliances. Following the service of a notice to abate a smoke nuisance at the premises No. 62, alterations were made to the plant, and during and after these were carried out a series of observations were taken at these premises.

In view of the low average period of black smoke observed over a period, including the observations 7, 8, and 9 in the list, no action was taken by the Health Committee in respect of these observations.

A visit was made to the exempted trade premises, after taking the observation referred to in Table I., and the management promised to carry out certain adjustments to their plant which would minimise the emissions of black smoke without interfering with the trade process.

In the work of smoke abatement every endeavour is made by the sanitary staff to demonstrate a practical spirit of co-operation with the branch of industry concerned, and there is evidence that this is appreciated by the improved results obtained during the year as indicated below :—

Item.	1934.	1935.
No. of Observations	358	328
	minutes	minutes
Total amount of Black Smoke Observed ...	245.66	186.25
Average amount of Black Smoke per		
Observation ... ..	.687	.570
Total number of Nuisances reported	5.	10.

Rag Flock.*Rag Flock Acts, 1911 and 1928.**Rag Flock Regulations.*

A number of premises in the Borough are occupied by firms who use rag flock in the course of their business, and one firm was found to be manufacturing rag flock.

Samples have been taken as follows:—

Sample No.	Place Taken.	Analyst's Report.	Action Taken.
R.F. 1	Upholsterer's Shop.	Genuine.	—
R.F. 2	Manufacturing.	Not genuine, there being 475 parts of chlorine in 100,000 parts of flock.	Proceedings taken in Borough Police Court. See table p. 69.

Disinfection for Infectious Disease.

Disease.	Rooms.	Visits.	No. of Cases.
Scarlet Fever	245	306	240
Diphtheria... ..	138	155	128
Erysipelas... ..	11	18	16
Tuberculosis	45	31	19
Typhoid Fever... ..	1	1	1
Measles... ..	8	1	1
Cancer	6	1	1
Puerperal Fever	7	1	1
Other causes	5	4	1
Total... ..	466	518	408

In addition to carrying out the disinfections which are enumerated above the sanitary staff have been called to various schools for disinfections.

Number of schools disinfected	9
Number of visits to schools for disinfection	16

Disinfestation of Verminous Premises.*Public Health Act, 1925.*

During the year the Council approved the decision of the Health Committee that all house premises and household effects found to be vermin infested should be fumigated at the expense of the Council.

Number of premises visited	207
Number of visits	247

Sanitary Accommodation in Schools.

During the year inspections were made of the sanitary accommodation in the Schools, and the following table shows the number and type of accommodation in each school:—

School.	Urinals	Water Trough Closets	Pail Closets	Privies
Alderman Smith Council	1	11	—	—
St. Stephen's C. of E.	1	11	—	—
All Saints' C. of E.	2	14	—	—
Elton Council	2	27	—	—
Guardian Angels' R.C.	1	13	—	—
Chesham... ..	2	8	—	—
St. John's C. of E.	2	2	12	—
St. Joseph's R.C.... ..	2	—	8	—
St. Mark's C. of E.	—	2	17	—
Walmersley C. of E.	1	6	—	—
St. Paul's (Bell) C. of E.	1	—	9	—
St. Paul's (Huntley) C. of E. ...	1	8	—	—
East Ward Council	2	26	—	—
Birtle C. of E.	1	—	—	7
Church Central C. of E.	1	2	17	—
Holy Trinity C. of E.	1	3	13	—
George Street... ..	1	1	12	—
St. Marie's R.C.	1	16	—	—
St. Thomas's C. of E.	1	22	—	—
St. Chad's C. of E.	1	11	—	—
Fishpool Council	1	14	—	—
St. Peter's C. of E.	1	11	—	—
St. George's C. of E.	1	10	—	—
Hollins	—	—	—	6
Total... ..	28	218	88	7
				6

Sanitary Condition of Cinemas, etc.

A commencement was made during the year with routine inspections of the sanitary accommodation at the places of amusement in the town, and where defects were found to exist the managements concerned readily carried out the necessary repairs.

Number of visits to Entertainment Houses	6
,, notices served and abated... ..	1

Public Conveniences.

During the year inspections were made of public conveniences in the town and parks, and these were found generally to be clean. A survey was made of all public conveniences, and a special report submitted to the Health Committee with a view to replacing a number which are of an unsatisfactory type. This report is under consideration pending the preparation of the financial estimates for 1936-7.

Housing.

Housing Acts, 1925-1930-1935.

Housing Consolidated Regulations.

General Observations.

In response to Circular 1331 issued by the Minister of Health in April, 1933, the Corporation submitted in March, 1935, a programme and Time Table of action proposed to be taken during the nine years 1935-1943, to deal with insanitary housing conditions existing within the Borough.

This programme provides for the representation of 1,944 houses under Part I. and Part II. of the Housing Act, 1930.

During the year 185 houses were dealt with. In October a Public Local Inquiry was held by the Minister in connection with six clearance areas comprising 64 houses, which were confirmed by him in January, 1936.

Demolition Orders were made in respect of nine houses, and one house was demolished in anticipation of a formal Order being

made. Two houses were referred to the Borough Surveyor as dangerous structures under the provisions of the Bury Corporation Act, 1932, and were demolished.

The remainder of the houses in the Pimhole Clearance Area were demolished and the site cleared during the year

On the 12th December, 1935, the Medical Officer of Health submitted an Official Representation to the Health Committee in respect of a further four Clearance Areas, comprising 70 dwelling-houses, which were confirmed by the Council at its next meeting, 2nd January, 1936. These are included here as they properly belong to the year 1935.

Statistics.

Clearance Areas.

Area.	No. of Premises.	No. of Persons.
Wood's Yard	10	29
Doctors Lane	13	39
Albion Street	5	14
Irwell Cottages	12	38
Livesey Street	11	33
East Garden Street	13	41
*Bambury Street No. 1	9	20
*Bambury Street No. 2	32	89
*Hill Street	16	36
*Wike Street	13	24
	<hr/> 134	<hr/> 363
Two areas dealt with in 1934	56	202
	<hr/>	<hr/>
Totals for areas dealt with under the Housing Acts, 1925-30 up to 31st December, 1935	190	565

*Council resolution 2nd January, 1936.

The yearly totals given below show the number of houses built within the Borough during the past 12 years :—

1924	...	...	...	...	...	...	...	102
1925	...	...	...	...	...	...	...	181
1926	...	...	...	...	...	...	...	162
1927	...	...	...	...	...	...	...	268
1928	...	...	...	...	...	...	...	383
1929	...	...	...	...	...	...	...	126
1930	...	...	...	...	...	...	...	338
1931	...	...	...	...	...	...	...	631
1932	...	...	...	...	...	...	...	619
1933	...	...	...	...	...	...	...	323
1934	...	...	...	...	...	...	...	417
1935	...	...	...	...	...	...	...	489

Total 4039

Of these 4,039 houses 2,099 were built by private enterprise and 1,278 by the Local Authority, 2,578 houses being subsidised (private builders 722; Local Authority 1,856). The number of houses built by the Corporation is now 2,136 (one estate was built prior to 1914). During the year 24 houses were demolished for Private Improvement purposes.

Number of new houses erected during the year :—

- (a) Total, including numbers given separately under (b) :
 - (i) By the Local Authority *nil*
 - (ii) By other Local Authorities *nil*
 - (iii) By other bodies and persons 489
- (b) With State Assistance under the Housing Acts :
 - (i) By the Local Authority.
 - (a) For the purpose of Part II. of the Act of 1925 *nil*
 - (b) For the purpose of Part III. of the Act of 1925 *nil*
 - (c) For other purposes *nil*
 - (ii) By other bodies or persons *nil*

1. Inspection of Dwelling-houses during the year :—

- (1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) 1576
- (b) Number of inspections made for the purpose... 4180
- (2) (a) Number of dwelling-houses (included under Sub-head (a) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 324
- (b) Number of inspections made for that purpose. 1140
- (3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation 144
- (4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation 41

2. Remedy of Defects during the Year without Service of formal Notices :—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	156
Number of back-to-back houses made into through houses	<i>nil</i>
Number of houses demolished	1

3. Action under Statutory Powers during the Year :—

A.—Proceedings under Sections 17, 18, and 23 of the Housing Act, 1930 :—

- (1) Number of dwelling-houses in respect of which notices were served requiring repairs. 19

- (2) Number of dwelling-houses which were rendered fit after service of formal notices :—
- (a) by owners *nil*
- (b) by Local Authority in default of owners *nil*

B.—Proceedings under Public Health Acts.

- (1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied 70
- (2) Number of dwelling-houses in which defects were remedied after service of formal notices :—
- (a) by owners 35
- (b) by Local Authority in default of owners *nil*

C.—Proceedings under Sections 19 and 21 of the Housing Act, 1930 :—

- (1) Number of dwelling-houses in respect of which Demolition Orders were made 9
- (2) Number of dwelling-houses demolished in pursuance of Demolition Orders *nil*
- (3) Number of dwelling-houses in respect of which an undertaking was accepted under Sub-Section (2) of Section 19 *nil*

D.—Proceedings under Section 20 of the Housing Act, 1930 :

- (1) Number of separate tenements or underground rooms in respect of which Closing Orders were made *nil*
- (2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit *nil*

E.—Proceedings under the Housing Act, 1925 :—

- Number of dwelling-houses demolished in pursuance of Demolition Orders *nil*

Factories and Workshops.*Public Health Acts, 1875 and 1890.**Factory and Workshops Acts, 1901-1907.*

The Local Authority are responsible, through their appointed officers, for the inspection, proper sanitary condition, and the sufficiency of the sanitary accommodation in factories. These responsibilities are further extended in workshops and workplaces to include general conditions of cleanliness and sufficiency of air space for the number of persons employed.

The following tables show the inspections of factories, workshops, and workplaces, together with the defects found and remedied.

Inspections of Factories, Workshops, and Workplaces.

PREMISES.	NUMBER OF		
	Inspections	Written Notices	Prosecuted Occupiers
Factories	91	13	—
(Including Factory Laundries)			
Workshops	234	67	—
(Including Workshop Laundries)			
Workplaces	—	—	—
(Other than Outworkers' Premises)			
Total	325	80	—

Defects found in Factories, Workshops, and Workplaces.

PARTICULARS.	NUMBER OF DEFECTS.			Number of offences in respect of which prosecutions were instituted.
	Found.	Rem'di'd	Referred to H.M. Insp'ct'r	
Nuisances under the Public Health Acts :				
Want of Cleanliness	26	23	...	...
Want of Ventilation	9	3	...	...
Overcrowding ... ..	...	...	...	...
Want of Drainage of Floors ... ..	...	...	...	...
Other Nuisances	105	60	...	...
Sanitary Accommodation :—				
Insufficient ... ..	...	...	...	...
Unsuitable or defective	35	28	...	...
Not separate for sexes ... ..	...	...	...	...
Offences under the Factory and Workshops Acts (s. 101) :—				
Illegal Occupation of Underground bakehouses ... ..	...	...	...	...
Other Offences	1	...	1	...
(excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921).	...	...	...	...
Total	176	114	1	...

During the year three notices were received from H.M. Inspector of Factories referring to defects remediable under the Public Health Acts.

Outworkers.

During the year two lists of outworkers were received, one from a local firm and one from an outside Local Authority. The premises referred to in the lists were visited and found to be satisfactory, and were accordingly entered in the register.

INSPECTION AND SUPERVISION OF FOOD.

Milk Supply.

Milk and Dairies (Consolidation) Act, 1915.

Milk and Dairies (Amendment) Act, 1922.

Milk and Dairies Order, 1926.

Milk (Special Designations) Order, 1923 and 1934.

The duties in connection with the above are divided between the Chief Sanitary Inspector and the Abattoir Superintendent. The following information refers to that part of the work under the supervision of the Chief Sanitary Inspector:—

Cowsheds, Dairies, and Milkshops.—The following is a summary of the particulars as recorded in the registers at 31st December, 1935:—

Number of persons registered as cowkeepers	52
„ premises registered as cowsheds	101
„ cowkeepers who are retail purveyors of milk	48
„ premises registered as dairies... ..	12
„ persons registered as retail purveyors of milk—	
(a) with premises in the Borough	35
(b) with premises outside the Borough ...	76
„ persons or firms registered as wholesale traders:—	
(a) with premises in the Borough	5
(b) with premises outside the Borough ...	6
Visits to Cowsheds	132
Visits to Dairies and Milkshops	131
Total visits	263

During the year a number of dairies and cowsheds were surveyed and informal notices, together with detail specifications of the necessary alterations, were served on the occupiers, and copies were also forwarded to the owners concerned.

Number of such notices and specifications served 12

One informal notice was served under Article 22 of the Milk and Dairies Order, 1926, to cleanse and limewash the cowshed.

The following is a list of the improvements carried out at dairy premises during the year:—

Number of new cowsheds built	1
„ cowsheds which have been altered to comply with the Milk and Dairies Order, 1926 ...	1
„ new dairies built (for producers)	2
„ new dairies built (for retail purveyors)	1
„ plans approved for reconstruction of cowsheds (not yet commenced)	2

Cleanliness.—During 1935, routine sampling of non-graded milk was commenced, and 44 samples were examined for total bacterial count and coliform organisms.

The results of the examinations may be summarised as follows:—

Ungraded Milk. Bacteriological Condition.

MILK PRODUCED IN THE BOROUGH.		
Not more than 30,000 bacteria per c.c., and no coliform bacillus in 1/10th c.c.	Not more than 200,000 bacteria per c.c., and no coliform bacillus in 1/100th c.c.	More than 200,000 bacteria per c.c., and for coliform bacillus in 1/100th c.c.
6=31.5%	7=37%	6=31.5%
MILK PRODUCED OUTSIDE THE BOROUGH.		
2=20%	4=40%	4=40%
TOTAL.		
8=27.6%	11=37.9%	10=34.5%

Graded Milk. Bacteriological Condition.

Grade.	No. of Samples.	Below Standard	Above Standard
Grade A	3	3	—
Pasteurised	12	5	7
Total	15	8	7

Graded Milks.—The following licences were granted during the year 1935:—

Licences to produce Grade A Milk	1
Supplementary licence to retail Certified Milk	1
Licence to pasteurise, bottle and sell Pasteurised Milk ...	1
Supplementary licence to sell Pasteurised Milk	1

The licences are granted subject to the milk complying with the bacteriological and other conditions laid down in the Milk (Special Designations) Order, 1923, and samples of milk were taken before granting the licences and will continue to be taken at intervals during the time the licences are held. With regard to the samples of pasteurised milk taken and found below standard, these samples were taken at various points during the process of pasteurisation for the purpose of checking the apparatus, following an unsatisfactory report on one sample. All other samples taken during distribution were found to be satisfactory.

MEAT AND OTHER FOODS.

Public Health Act, 1875.

Public Health (Meat) Regulations,

Bury Corporation Acts, 1909 and 1932.

The work of meat and food inspection in the town and in premises other than the abattoir was transferred to the sanitary staff when the re-organisation took place in October, 1934. This work was continued during the year, routine inspections being carried out at all food shops, markets, and street hawkers' carts, etc. A commencement was made with the establishment of a

record of every food preparing premises in the town in addition to the registrations required by Sections 189 and 196 of the Bury Corporation Act, 1932, of all premises used for the preparation, manufacture, or sale of ice cream, potted, pressed, pickled or preserved meat, fish or other food intended for sale for human consumption and all vendors of such commodities. To facilitate the registration of food premises provided for in the Bury Corporation Act, 1932, it became necessary to establish standards for the structural condition of premises and the hygienic conditions during the occupation of such premises. The following standards were approved by the Health Committee for this purpose:—

Standard for Ice Cream.

Sanitary Requirements to be Observed by Ice Cream Makers and Vendors.

Preparing Room. The preparation or storing of ice-cream or any similar commodity or any material used in the manufacture thereof, in any cellar or sleeping room, is prohibited. Painted walls should be painted every three years and washed down every six months. If limewashed the limewashing should be renewed every twelve months or oftener if necessary. The ceilings should be painted or limewashed and periodically cleansed as also the walls, and kept at all times free from cobwebs and dust. The floors should be constructed of an impervious material such as cement concrete or tiles. All floors must be swept and washed daily. There must be no drain openings in the preparing room or store, or direct communication between these rooms and a water closet or a bedroom. The rooms must be kept free from superfluous furniture, clothing, boots and rubbish.

Lighting and Ventilation. Suitable and efficient lighting and ventilation should be provided.

Cupboards. All cupboards or stores, where ice-cream or any similar commodity or any material used in the manufacture thereof is kept or placed, must be periodically cleansed.

Utensils. All utensils used in the business must at all times be kept clean. Vessels that have contained milk should be well rinsed with cold water, then well washed with hot water and soda. The vessel should then be steamed or well rinsed with boiling water, then inverted and left to drain or dry. The interior should not be afterwards wiped with a cloth.

Water Closets, Yards, Sinks, Urinals, etc. Every care must be taken at all times to keep these clean and free from offensive odours. Fowls, pigeons, rabbits or other animals must not be kept in any room or place where ice-cream is prepared, or in any yard or place or in close proximity thereto. Unsound or decomposing materials of any description act as breeding grounds for flies and vermin.

Refuse. All waste refuse must be placed in covered galvanised iron bins which must be so placed that offensive odours arising therefrom cannot be carried by the prevailing wind into the room. These receptacles should be emptied frequently.

Cleanliness. Cleanliness of the premises, utensils, materials, as well as personal cleanliness is the essential factor in the production of pure ice-cream. Experience shows that contamination of this commodity usually occurs after the ingredients are boiled, thus pointing to either lack of care in the sterilizing of the utensils or the access of dirt and dust or pollution by flies, etc. Milk, cream, custard, or other materials must be adequately covered for protection from contamination. Adequate and efficient means must be provided for persons engaged on the premises to keep clean, such as an ample supply of water for washing, clean towels, etc.

Infectious Disease. Notice of the occurrence of infectious disease among employees to be given to the Medical Officer of Health.

Name and Address. Every dealer selling ice-cream from a cart, barrow or stand shall have his name and address legibly painted thereon.

Standard for Potted Meat.

Sanitary Requirements to be observed at premises registered for the Preparation or Manufacture of Potted, Pickled or Preserved Meat, Fish or other food intended for purposes of sale.

Preparing Room. The preparation, manufacture, or storage of potted, pressed, pickled, or preserved meat, fish, or other food intended for purposes of sale in any cellar or sleeping room is prohibited. Painted walls should be painted every three years and washed down every six months. If limewashed, the lime-washing should be renewed every twelve months or oftener if necessary. The ceilings should be painted or limewashed and periodically cleansed, and kept at all times free from cobwebs and dust. The floors should be constructed of an impervious material such as cement concrete or tiles. All floors must be swept daily and washed at least once each week. There must be no drain openings in the preparing room or store or direct communication between these rooms and a water closet or a bedroom. The rooms must be kept free of superfluous furniture, clothing, boots, and rubbish. Suitable and efficient lighting and ventilation should be provided.

Cupboards. Cupboards used for storage of any foodstuffs for preparation or manufacture must be adequately ventilated and maintained in a clean condition.

Utensils. All utensils used in the business must at all times be kept clean.

Water Closets, Yards, Sinks, Urinals, Drains, etc. Every care must be taken at all times to keep these clean and free from offensive odours. Proper steps must be taken to prevent the discharge of grease into the drains, as experience has shown that this will cause frequent stoppages. Fowls, pigeons, rabbits or other animals must not be kept in any room or place used for the purposes of the businesses before-mentioned, or in any yard or place in close proximity thereto. Unsound or decomposing materials of any description act as breeding grounds for flies and vermin.

Refuse. All waste refuse must be placed in covered galvanised iron bins and emptied frequently.

The presence of rats or mice on the premises should be reported without delay to the Cleansing Superintendent, Parsons Lane, Bury, and immediate steps taken by the occupier to clear any infestation by rodents. Particular attention must be given to this as rats and mice have been proved to be the cause of certain cases of food poisoning. All foodstuffs used or in course of preparation or manufacture must be adequately protected from any source of contamination. Sufficient and proper means must be provided for persons engaged on the premises to keep clean, such as an ample supply of water for washing, clean towels, etc.

Infectious Disease. Notice of occurrence of infectious disease among employees must be given as early as possible to the Medical Officer of Health.

Name and Address. Every dealer selling any potted, pickled or preserved meat, fish or other food from a cart, barrow, stand, pail or receptacle shall have his name and address legibly painted thereon.

The following is a list of the premises inspected and recorded during the year :—

Fried Fish premises	67
Butchers	18
Restaurants	5
General Food premises	4
Butchers' making-up premises	3
Potted Meat, etc., preparing premises	33
Grocer	5
Greengrocer	6
Fish	3
Tripe Shop	4
Ice Cream manufacturing premises	6
Bakehouses :—	
Factory	9
Workshop	67
Total to 31st December, 1935	230

Number of visits to food preparing premises and shops...	321
„ visits to meat shops (not included above) ...	23
Total	344

The number of notices served during the year:—

Premises.	Served.	Defects Found.	Defects Abated.
Butchers' Shops... ..	6	8	6
Fried Fish Shops	23	35	23
Other Food Shops	4	6	5
Bakehouses... ..	53	140	86
Totals	86	189	120

Ice Cream Premises.

Number of premises registered for the manufacture of Ice Cream	6
Number of persons registered as vendors of Ice Cream...	18
Number of visits (not included in other total)	46

Potted and Preserved Food, etc., Premises.

Number of premises registered:—

Retail	28
Wholesale	2

Markets.

There are two markets in Bury, a large covered permanent Market Hall and a weekly open market held every Saturday. In addition the open market is occupied several days during the week by not more than five or six food stalls for the sale of fish, black puddings, greengrocery, and confectionery. The number of food stalls is as follows:—

	Covered Market.	Open Market.
Butchers	2	9
Fruiterers	1	34
Bacon... ..	8	2
Cooked Meat	—	4
Fish	—	3
Confectionery and Sweets	5	16
Poultry	—	12
	16	80

Number of visits to Markets	216
------------------------------------	-----

The market stalls are visited three times every Saturday, once during the morning, afternoon, and evening.

In the covered market the conditions provided for the sale of food are generally satisfactory. The arrangements for the food stalls in the open market differ according to the nature of the trade carried on.

The stalls for the sale of meat and cooked meats are probably the best type of this kind which it is possible to design.

The addition of facilities for washing and disposing of slop-water at each stall would make them comply with the best hygienic standard.

Stalls occupied for the sale of sweets and confectionery, and to a lesser extent fruiterers' stalls also, lack suitable screens at back and sides, which would prevent contamination due to dust and dirt being blown on the food exposed for sale. Fish stalls at present are furnished with wooden surfaces, which would be greatly improved by a covering or slab of suitable impervious material. In addition the provision of a water tank behind each stall is desirable to facilitate the sale of fish in the cleanest condition possible.

Merchandise Marks Acts and Orders.

Altogether there is a total of 10 Orders made under the Act of 1926 at present in force with the object of ensuring that imported raw tomatoes, meat, fish, dead poultry, apples, butter, oat products, currants, raisins, sultanas, eggs, bacon, and honey are clearly marked

(a) as Empire or Foreign, or

(b) with the name of the country of origin,

so that an intending purchaser may readily distinguish between home-grown produce and that which is imported.

Whilst this duty appears at first glance not to be within the province of the food inspectors, in practice it is found greatly to assist the regular inspections of food stalls and shops. It has called for a great deal of attention during the year in routine visits and explanations to traders.

The following is a summary of work done :—

Total visits, including visits to market stalls and shops	5,108
Number of verbal notices to shopkeepers	20
„ warning letters to shopkeepers	5
„ verbal notices to stallholders	137
„ warning letters to stallholders	5

Agricultural Produce (Grading and Marking) Act.

No action was necessary under this Act during the year, as the sale of graded produce has not been established in this district.

ADULTERATION, Etc.

Food and Drugs (Adulteration) Act, 1928.

Artificial Cream Act, 1929.

Regulations re Preservatives : Condensed Milk, Dried Milk, Milk, Butter.

Food Sampling and Analysis.

Table I., following, shows the number and nature of the samples of food and drugs obtained during the year under the Food and Drugs (Adulteration) Act, 1928, and submitted to the Public Analyst.

The Table also shows the result of the analyses.

The Sale of Milk Regulations, 1901, lay down that unless milk contains a minimum of 3 per cent. fat and 8.5 per cent. solids not fat, it shall, until the contrary is proved, be deemed to have been adulterated. The average percentage composition of the milk examined in 1935 is as follows :—

Period.	No. of Samples.	Milk Fat. Per cent.	Solids not Fat Per cent.
1st Quarter	36	3.67	8.99
2nd Quarter	26	3.73	8.96
3rd Quarter	50	3.44	8.99
4th Quarter	24	3.68	8.94
1st January to 31st December, 1935	136	3.61	8.97

Public Health (Condensed Milk) Regulations.—Number of samples submitted to the Public Analyst, 3. All the samples were found to be genuine, and the labels complied with the regulations.

Public Health (Dried Milk) Regulations.—Number of samples submitted to the Public Analyst, 3. All the samples were found to be genuine.

Artificial Cream Act, 1929.—One premises was registered for the purposes of sale under this Act during the year. No samples were taken.

TABLE I.

Samples Taken.

ARTICLE	No of Samples			No. Genuine			No. Adulterated		
	F'r'm'l	Inf'r'l	Total	F'r'm'l	Inf'r'l	Total	F'r'm'l	Inf'r'l	Total
Arrowroot	1	1	...	1	1	...	...	...
Aspirin	2	2	...	2	2	...	...	...
Baking Powder	1	1	...	1	1	...	...	...
Barley	1	1	...	1	1	...	...	...
Beans, Baked	1	1	...	1	1	...	...	...
„ Broad	1	1	...	1	1	...	...	...
„ Curried	1	1	...	1	1	...	...	...
Black Puddings	1	1	...	1	1	...	...	...
Boiled Sweets...	1	1	...	1	1	...	...	...
Boric Powder...	1	1	...	1	1	...	...	...
Butter	13	13	...	13	13	...	...	...
Catarrh Pastilles	1	1	...	1	1	...	...	...
Camphorated Oil	1	1	...	1	1	...	...	...
Cheese	1	1	...	1	1	...	...	...
Cream Cheese...	2	2	...	1	1	...	1	1
Cocoa	1	1	...	1	1	...	...	...
Cod Liver Oil...	2	2	...	2	2	...	...	...
Coffee	2	2	...	2	2	...	...	...
Corn Flour	1	1	...	1	1	...	...	...
Currants	2	2	...	2	2	...	...	...
Epsom Salts	1	1	...	1	1	...	...	...
Flour	1	1	...	1	1	...	...	...
Fruit Cake	1	1	...	1	1	...	...	...
Fruit Cream	1	1	...	1	1	...	...	...
Fruit Salad	1	1	...	1	1	...	...	...
Ginger Wine	2	2	...	2	2	...	...	...
Glycerine	3	3	...	3	3	...	...	...
Grape Fruit Squash	1	1	...	1	1	...	...	...
Ground Ginger	1	1	...	1	1	...	...	...
Jam	3	3	...	3	3	...	...	...
Jellies	2	2	...	2	2	...	...	...
Lard	3	3	...	3	3	...	...	...
Laxative Chocolate	1	1	...	1	1	...	...	...
Lemon Cheese	1	1	...	1	1	...	...	...
Licorice All Sorts	1	1	...	1	1	...	...	...
Lobster	1	1	...	1	1	...	...	...
Malt Vinegar	3	5	8	1	2	3	2	3	5
Margarine	17	17	...	17	17	...	...	...
Milk	136	...	136	129	...	129	7	...	7
Mustard	1	1	...	1	1	...	...	...
Oatmeal	1	1	...	1	1	...	...	...
Olive Oil	1	1	...	1	1	...	...	...
Paregoric	1	1	...	1	1	...	...	...
Pepper	1	1	...	1	1	...	...	...
Potted Meat	1	1	2	1	...	1	...	1	1
Pressed Beef	1	1	...	1	1	...	...	...
Raisins	1	1	...	1	1	...	...	...
Sage	1	1	...	1	1	...	...	...
Sauce	1	1	...	1	1	...	...	...
Sausages	1	1	...	...	...	...	1	1
Sugar	1	1	...	1	1	...	...	...
Sultanas	3	3	...	3	3	...	...	...
Tea	1	1	...	1	1	...	...	...
Tincture of Iodine	2	2	...	2	2	...	...	...
Tinned Peas	1	1	...	1	1	...	...	...
Tinned Salmon	2	2	...	2	2	...	...	...
Tomato Soup	1	1	...	1	1	...	...	...
TOTAL	140	105	245	131	99	230	9	6	15

In addition 3 Informal samples of Condensed Milk and 3 of Dried Milk were taken under the Public Health (Condensed Milk) Regulations and Public Health (Dried Milk) Regulations respectively.

TABLE II.—Administrative action taken in respect of Samples reported by the Public Analyst not to be genuine or otherwise irregular.

No. of Sample Inform.	Article	Nature of Adulteration.	Action Taken.
49	Vinegar	Dilute solution of acetic acid artificially coloured.	Formal sample taken later. See No. 57.
57	Do.	Not Malt Vinegar. A dilute solution of acetic acid artificially coloured.	Reported to Health Committee and letter of warning was sent by the Town Clerk to the Vendor.
53	Milk	Sample deficient of 11% of its fat.	This sample taken in the Street. An appeal to the cow sample was subsequently taken. See No. 60.
60	Do.	Sample deficient of 9% of its fat.	Appeal to the cow after sample No. 53. Reported to Health Committee and letter of warning re quality of milk sent to a Milk Producer. See also sample No. 177.
55	Do.	1% of added water and deficient by 3% in fat.	This sample taken in the street. Appeal to the cow samples Nos. 58 and 59 taken and found to be genuine. Vendor prosecuted in Borough Police Court. Case dismissed. See Table.
90	Do.	Deficient of 6% of its fat.	This sample taken in the street. Appeal to the cow samples Nos. 97 and 98 taken at the farm in the course of milking. These were found to be genuine. Vendor prosecuted at Borough Police Court—and convicted. See Table.
133	Do.	Deficient of 28% of its fat.	This sample taken in the street. Appeal to the cow samples Nos. 149 and 150 taken at the farm. Sample No. 149 found to be genuine.
150	Do.	Deficient of 9% of its fat.	Appeal to the cow sample after sample No. 133. Reported to Health Committee and a letter of warning sent to Producer by Town Clerk re quality of milk.

No. of Sample	Article	Nature of Adulteration.	Action Taken.
148	Cream Cheese	Not Cream Cheese.	Reported to Health Committee and a letter of warning sent to Vendor by the Town Clerk.
177	Milk ...	Deficient of 5% of its fat.	This sample was taken at the same farm as samples Nos. 53 and 60 six months later. A further letter of warning sent by the Town Clerk.
210	Potted Meat...	Deficient 16% of its meat solids.	A formal sample No. 234 taken and found to be genuine. A verbal warning given to vendor by Chief Sanitary Inspector.
283	Vinegar ...	Vinegar 80%. Extraneous water, 20%.	A formal sample No. 287 taken.
287	Do. ...	Ditto ditto	Reported to Health Committee and a letter of warning sent to vendor by Town Clerk.
284	Do.	Contained mould and nematode worm probably due to a dirty container.	Reported to Health Committee and a letter of warning sent to vendor by Town Clerk.
113	Sausage ...	Contained 100 parts per million sulphur dioxide and was not labelled in prescribed manner.	Verbal warning to vendor by Chief Sanitary Inspector.
138	Margarine ...	Improperly labelled marg.	Reported to Health Committee and letters of warning sent by Town Clerk to each vendor.
147	Do.	Ditto	Ditto
151	Do.	Ditto	Ditto
154	Do.	Ditto	Ditto
189	Do.	Ditto	Ditto
247	Do.	Ditto	Ditto
249	Do.	Ditto	Ditto

**Articles of Food examined for Preservative in accordance with
the Public Health (Preservatives, etc., in Food) Regulations,
1925/6/7.**

Food.	No. of Samples Examined.	Nature of Preservative.	Amount.		Remarks.
			Allowed.	Found.	
Milk	136	—	—	—	
Ginger Wine ...	2	Sulphur Dioxide	350	—	
		Benzoic Acid	600	—	
Sausages... ..	1	Sulphur Dioxide	450	100	This sample was not labelled as required by the Regulations.
Sultanas... ..	3	„	750	—	
Raisins	1	„	750	—	
Grape Fruit					
Squash	1	Benzoic Acid	2000	—	
Jam	3	Sulphur Dioxide	40	—	
Jellies	2	„	40	—	
Sauce	2	Benzoic Acid	250	—	
Sugar	1	Sulphur Dioxide	370	—	
Corn Flour... ..	1	„	100	—	

The Standards are in parts per million.

SHOPS INSPECTION.

Shops Acts. 1912 to 1934.

Shops Acts Regulations.

During the year routine inspection of shop premises was commenced, and to facilitate this work being carried out at a uniform rate in all parts of the town, each District Sanitary Inspector was appointed Inspector under the Acts. It is the intention to increase the inspections under this heading during the coming year.

Number of inspections made... ..	57
Number of shops recorded in the register	56
Number of verbal notices	6

Petroleum Acts.**Explosives Acts.**

During the early part of the year the sanitary staff made 49 visits under this heading. In May of the year this work was transferred to the Fire and Lighting Department.

Fertilizers and Feeding Stuffs Act, 1926.

During the year 12 samples were taken for analysis under the above Act, of which 10 were Fertilizers and 2 Feeding Stuffs. All were found to be genuine.

The following table shows the samples taken :—

Article.	Fertilizer or Feeding Stuff.	No. of Samples.
Alfalfa	Feeding Stuff ...	1
Basic Slag	Fertilizer... ..	1
Bone Meal	„	3
Clay's Fertilizer	„	1
Fish Meal	„	1
Hoof and Horn Meal	„	1
Indian Meal	Feeding Stuff ...	1
Sulphate of Ammonia	Fertilizer... ..	2
Super Phosphate	„	1

Pharmacy and Poisons Act.

Under this Act the Local Authority is required to appoint Inspectors for the purposes of visiting premises where poisons are kept for sale, and inspecting the methods of storage and labelling of the said poisons. Action may be taken against any person contravening the Act. Your Chief Sanitary Inspector is appointed an Inspector Under this Act, and has carried out inspections as required during the year.

The following table shows the legal proceedings taken and the result of such during the year :—

Acts, Bye-Laws, or Regulations under which proceedings were instituted.	Default or Offence.	Result.	Fines.	Costs.
Food and Drugs (Adul- teration) Act, 1928.	Selling adul- terated milk six per cent. defi- cient in fat.	Conviction.	£ s. d. 5 0 0	£ s. d. 1 11 6
do.	Selling adul- terated milk 3 per cent. defi- cient of its fat, and with 1% added water.	Dismissed.	—	—
Rag Flock Act and Regulations.	Selling rag flock in which there was 475 parts of chlorine per 100,000	Conviction.	10 0 0	5 15 6
Total			15 0 0	7 7 0

HOUSING ACT, 1935, SECTION 1 (i).

REPORT ON THE OVERCROWDING SURVEY OF THE BOROUGH.

The following is a report on the work and results obtained by the survey for Overcrowding in the Borough.

Introduction.

The survey for the purposes of ascertaining overcrowding refers to dwellinghouses or any premises used by members of the working classes or of a type suitable for such use, and in order to keep within the limits of the instructions of the Act it was

decided to survey all houses in the district below £17 rateable value.

Staff.

Temporary Staff: 1 Clerk.

8 Enumerators.

Supervising duties by four District Sanitary Inspectors on their respective districts.

Cost.

Estimated cost... ..	£460
Actual expenditure	£355

Houses Visited—" A " or Preliminary Survey.

(1) Whole Borough... ..	15,174
(2) Corporation Housing Estates	2,119
(3) Corporation Houses (other than Housing Estates)	153
(4) Houses in Slum Clearance Programme	1,628
(5) Private Property	12,902

Houses Visited and Floor Areas Measured for " B " Survey.

Whole Borough... ..	1,445
---------------------	-------

Number of Houses Recorded as Overcrowded.

Percentage expressed of the total houses in the Borough.

Whole Borough (all classes)	277	...	1.82%
Corporation Housing Estates	68	...	3.21%
Corporation Houses (other than Housing Estates)	2	...	1.31%
Slum Clearance Houses	49	...	3.00%
Private Property... ..	158	...	1.40%

Number of Houses Recorded as Empty.

Whole Borough (all classes)	290
Corporation Housing Estates... ..	19
Corporation Houses (other than Housing Estates)	10
Slum Clearance Houses... ..	21
Private Property... ..	240

Number of Houses and Overcrowding conditions in Wards.

WARD.	Number of Houses	Number of Houses Overcrowded.	Percentage of Overcrowding expressed as percentage of total houses in Borough.
East	3,307	57	1.72%
Elton	3,669	77	2.10%
Moorside	3,457	56	1.62%
Church	1,000	24	2.40%
Redvales	3,183	46	1.44%
Unsworth... ..	1,558	17	1.09% 3.05%.

Number of Houses Recorded as Overcrowded on Table " A "
(Insufficient Separation of the Sexes).

6 Two-roomed houses. (All these houses were also overcrowded under Table I. or Table II.).

With my best thanks to the staff for their loyal support in a very trying year, and also to you, Sir,

I am,

Yours faithfully,

JOSEPH ECKERSLEY,

Chief Sanitary Inspector.

SANITARY INSPECTORS.

The following is a summary of a report sent to the Ministry of Health in the early part of the year with regard to the work of the Sanitary Inspectors' Department:—

Nuisances.—A system has been adopted to ensure the regular following up of notices regarding nuisances, and provides a continuous record from the first notification to the final abatement of a nuisance.

Common Lodging Houses.—Detailed survey made of seven registered common lodging houses and notices served on owners and keepers.

Houses Let in Lodgings.—Detailed survey made of registered premises, and thus dealt with on similar lines to common lodging houses.

Smoke Abatement.—Notices served, and as a result definite improvement recorded.

Privy Conversions.—Conversions in the Hollins district, newly acquired by the Bury Council, proceeding.

Transfer of Duties.—Inspection of bakehouses, offensive trade premises, markets, food shops, food preparing premises, workshops and workplaces, and dairies and farms transferred to the supervision of the Chief Sanitary Inspector from the Abattoirs Superintendent to relieve the latter in order that he may devote more time to his more important duties.

Milk Samples.—A greatly increased number is now taken annually for examination for cleanliness and examination for tubercular bacilli.

Supervision of Food Supplies.—Work under the Food and Drugs Act, and Fertiliser and Feeding Stuffs Act and the Merchandise Mark Act was taken over by the Public Health Department. Frequent personal consultations made by officers of this department with the Public Analyst weekly with regard to samples.

Housing Survey.—A complete survey of the housing conditions of the Borough was carried out by the Medical Officer of Health and the Chief Sanitary Inspector, and 1,944 houses included in a slum clearance programme. In addition 7,756 houses marked for inspection for repairs under Section 17 of the 1930 Housing Act.

Sanitary Inspectors' Office.—New Office furnishings and equipment were procured for the chief sanitary inspector (a new appointment commenced at the end of 1934). The district sanitary inspectors' office was completely re-organised and new equipment, filing systems, etc., installed. The Medical Officer of Health receives personal reports daily from the Chief Sanitary Inspector.

SECTION 4.

Public Abattoirs.

Meat Inspection.

Contagious Diseases (Animals)
Acts.

PUBLIC ABATTOIRS.

REPORT OF SUPERINTENDENT AND MEAT INSPECTOR.

During 1935, work at the Public Abattoir continued to reflect improved trading conditions.

There was a decline in the number of sheep and lambs slaughtered from the high record of the past two years, but a more than corresponding increase by weight in beasts and pigs.

English beef has undoubtedly been assisted by the Government subsidy; notwithstanding, the wholesale price has again tended lower.

Pig production has been stimulated by the Marketing Schemes and low price for animal feeding stuffs. This has resulted in lower wholesale prices.

Mutton and lamb was in shorter supply, and the wholesale price was again higher during the year.

The Abattoir is an approved Dead Weight Certification Centre under the Cattle Industry (Emergency Provisions) Act, 1934; it is well equipped for large scale slaughtering and distribution of meat over an area much greater than the County Borough of Bury.

Centralised slaughtering and orderly marketing of meat will become questions of great importance in the future, if the quota method of restraint on the free flow of meat from exporting countries to Great Britain is continued, together with the policy of subsidising home production.

Following the successful installation of an electrically operated instrument for the stunning of pigs in April, 1934, the Corporation adopted section 1 of the Slaughter of Animals Act, 1934, making compulsory the stunning of all animals before slaughter, as from April, 1935. Electrically operated instruments for stunning have been erected in all slaughter-halls, the change-over having worked smoothly and given general satisfaction.

Under the above Act, 107 men are licensed to slaughter or stun animals.

During the past year important improvements were carried out in the pig slaughtering department, hoisting gear and automatic drops being installed with segregation pens and new concrete floor.

NUMBER OF ANIMALS SLAUGHTERED AT THE ABATTOIR
DURING THE PAST 10 YEARS.

	Beasts.	Sheep and Lambs.	Pigs.	Calves.	Total.	Weight in Tons.
1926	4142	22333	3849	462	30786	1902
1927	4256	25434	4760	541	34991	2123
1928	4170	24500	5586	472	34728	2151
1929	4138	23638	4998	453	33227	2072
1930	3930	19762	4239	389	28320	1882
1931	3606	19194	4635	426	27861	1796
1932	3494	22313	5186	478	31471	1880
1933	3542	25668	4655	437	34302	1904
1934	3424	25327	5026	634	34411	1912
1935	3721	22795	5607	608	32731	2000

Meat Inspection.

The various animals, carcasses, etc., passing through the Abattoir have been carefully examined, both before and after slaughter.

The quality has been of a uniformly high standard.

During the year 1,392 carcasses required special examination, of which number 366 were affected with Tuberculosis in varying degree, as set out in the table appended.

Bulls	were affected in more or less degree to the extent of 2.0 %				
Steers	„	„	„	„	1.01%
Heifers	„	„	„	„	4.14%
Cows	„	„	„	„	28.88%
Pigs	„	„	„	„	4.86%

The percentage of meat destroyed on account of Tuberculosis was :—

Beef 0.63%. Pork 0.75%.

It was found necessary to condemn and destroy (for causes other than Tuberculosis) the entire carcasses and organs of 14 sheep, 16 pigs, and 2 calves. A large number of organs were condemned on account of parasitic infestations.

The amount of meat found to be unfit for human consumption was 29,449-lbs., this being destroyed at the Town's Yard, Fernhill, under supervision of the Cleansing Superintendent.

Recognition by Agriculturists of the loss caused by parasitic infestation, which to a large extent is preventable, would bring home the importance of taking steps to combat this trouble at the source. Distomatosis could be reduced if more attention were paid to drainage, ditching and stagnant pools on pasture land, by attacking the intermediate host of the liver fluke in its habitat.

The Warble Fly (Dressing of Cattle) Order of 1936, has been welcomed by Meat Traders, and hopes are entertained that the Order will be made effective. It has been known for some time that the Warble pest can be dealt with and stamped out by a systematic Derris-Soap-Wash dressing, the cost of which, apart from the labour involved, is negligible.

Compulsory dressing of cattle will ultimately put large sums of money into the pockets of producers and at the same time save cattle much pain and irritation during the migratory and maturing periods.

Table showing extent of Tuberculous Diseases and Weight of Diseased Meat Destroyed, year ending
December 31st, 1935.

Kind of Animal.	Number Examined.	EXTENT OF TUBERCULOSIS IN ANIMALS EXAMINED.													OTHER DISEASES.					
		Of which were Tuberculous	Heads.	THORAX.			ABDOMEN.							Entire Carcases Condemned owing to Tuberculosis	Weight of Meat and Offal destroyed on account of Tuberculosis	Weight of Meat and Offal destroyed on account of other diseases.	Total Weight of Meat destroyed for all diseases.			
				Lungs	Hearts and Pericardii	Serous Membranes	Livers	Stomachs	Spleens.	Kidneys	Intestines	Uteri	Serous Membranes					Mesenteries	Udders	
{ Beasts	Bulls ...	650	13 28 39 7 — 87	64	69	1	32	31	10	12	5	2	...	16	14	6	1 Bull. 2 Oxen. 8 Cows. 3 Heifers — 14	lbs. 15213	lbs. 2114	lbs. 17327
	Oxen ...	2767																		
	Cows ...	135																		
	Heifers	169																		
		3721																		
Sheep ...	22795	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2023	2023
Pigs.....	5607	279	248	206	...	...	10	197	...	13	5	...	...	2	25	...	17 Pigs	8377	1522	9899
Calves...	608	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	200	200
	32731	366	312	275	1	42	228	10	25	10	2	...	18	39	6	31	23590	5859	29449	

CONTAGIOUS DISEASES (ANIMALS) ACTS.

The Regulation of Movement of Animals under the Transportation of Animals Orders, the Licensing involved under the several Movement Restriction Orders, and the consequent tracing of animals from areas affected owing to suspicion or contact continues to throw an increasing amount of work on this department.

Foot and Mouth Disease.—No cases occurred in the Borough, but outbreaks in other parts of the country caused a certain amount of restriction on movement. For a short period the County Borough was in a Movement Restriction area owing to an outbreak near Macclesfield and one at Bamford.

Swine Fever.—Movement Restrictions covering the whole County of Lancaster were in force during the first six months of the year. One outbreak was confirmed in the Borough.

Anthrax.—No cases were reported in the Borough.

Sheep Scab.—No cases were reported in the Borough, but the Pennine Range (Movement of Sheep) Order of 1934, was in force for the greater part of the year.

Tuberculosis Order.—Nine cases were reported, all of which were confirmed. These were dealt with in accordance with the Order.

Milk and Dairies (Consolidation) Act, 1915.

The Veterinary Inspector (Mr. W. Packman) examined 1,231 dairy cows on 59 farms in the Borough twice during the year.

Fifty-nine samples of mixed milk—one from each of 59 farms—were submitted for biological examination for evidence of Tubercle Bacilli. Fifty-three samples were returned as negative and six positive.

Thirty-one “ control ” samples were submitted from the six farms involved, resulting in six cows being isolated, one from each farm, to be dealt with under the Tuberculosis Order.

H. WALTON,

Superintendent and Inspector.

SECTION 5.

**Prevalence of and Control Over
Infectious and other Diseases.**

PREVALENCE AND CONTROL OVER INFECTIOUS AND OTHER DISEASES.

Infectious Diseases Generally.

Smallpox.—No case of Smallpox occurred in the borough during the year.

The following table gives particulars regarding vaccination during recent years :—

	Totals 1929	Totals 1930	Totals 1931	Totals 1932	Totals 1933	Totals 1934	Totals 1935
Births (during previous year)	874	874	864	838	882	930	929
Vaccinated	112	139	148	138	170	185	141
Insusceptible of Vaccination ...	3	3	—	2	3	2	1
Conscientious Objection Certificates	589	598	566	561	575	593	650
Dead, Unvaccinated...	58	52	53	50	60	44	55
Postponed by Medical Certificate	15	8	11	12	15	16	10
Removal to districts known.....	36	24	26	29	22	22	23
Removal to districts unknown.....	13	12	14	17	27	19	17
Unaccounted for	48	38	46	29	22	49	32

Table showing percentage of Vaccination, and also comparison with the previous six years :—

	Year ending December 31st,						
	1929	1930	1931	1932	1933	1934	1935
Number of Births ..	874 ...	874 ...	864...	838 ...	882...	930 ...	929
Vaccinated	12.8 ...	15.9 ...	17.1...	16.5 ...	19.3...	19.9 ...	15.2
Con. objection Certs.	67.4 ...	68.4 ...	65.5...	66.9 ...	65.2...	63.8 ...	70.0
Unaccounted for ...	3.2 ...	4.3 ...	5.3 ...	3.5 ...	2.5...	5.3 ...	3.4

NOTE :—Births include all births registered in the Borough, i.e., before deduction of “outside” births and addition of inward transfers.

Scarlet Fever.

Cases 264 Deaths nil

The number of cases notified each quarter were as follows :—

First quarter, 1935	...	...	...	...	...	...	...	86 cases
Second	„	„	...	...	...	...	...	68 „
Third	„	„	...	...	...	...	...	40 „
Fourth	„	„	...	...	...	...	...	70 „

Of the 264 notified cases, 228 were removed to hospital for treatment. In the last quarter of the year there was a preponderance of cases. The accommodation at the infectious diseases hospital was sufficient. The type of disease was mild. Certain cases were given either anti-streptococcal serum or anti-diphtheritic serum. The treatment proved efficacious.

Diphtheria.

Cases 135 Deaths 8

All cases were removed to hospital except one. The number of cases of diphtheria during the last ten years, and the numbers of deaths from the disease during that period can be seen in the following table :—

	Cases	Deaths.	Case Mortality
1926	66	11	16.6
1927	81	2	2.4
1928	94	7	7.4
1929	167	5	3.0
1930	46	—	—
1931	20	—	—
1932	31	1	3.2
1933	95	6	6.31
1934	90	10	11.1
1935	135	8	5.9

Diphtheria is a disease in which the greater number of cases is found under the age of ten years. It is a much more formidable disease than scarlet fever. The case mortality in 1935 was 5.9.

There are several strains of the diphtheria bacillus, some of which cause a much more severe attack of diphtheria than others.

This amounts in part for the number of fatal cases being increased in some years. The younger a child is, the more grave is the risk of fatality when the child is attacked by the disease. Modern medical science has placed in our hands a most powerful weapon in the prevention of attack by this disease. That weapon is active immunisation. The immunisation consists of three small, painless, harmless, and simple injections into the arm of a child. After the injections no ill effects happen. There is no scarring or sores left, and the child carries on in just the same way as before the injections; work, play, sleep and appetite are not interfered with. The injections act by making the blood able to resist the poisons of the diphtheria germs. Practically all the harmful effects of the disease are due to these poisons. Nearly every child who has received immunisation treatment is completely protected against the dangers of diphtheria. At the present time of writing, not one of the many children who have received a course of treatment has contracted diphtheria. However, amongst a very large number of children who undergo a course of immunisation an extremely small percentage may contract the disease. This is on account of some loss of protection due to the peculiarity of the child's body or blood. The attack of diphtheria in these children who form the small percentage contracting the disease is of a mild form, and the majority of the cases are nearly always trivial, showing that as a result of the injections—even in cases who have lost partial protection—the evil results of diphtheria are staved off. Immunisation against diphtheria was started at the Wylde Clinic in August, 1935, and so far 562 children have undergone a course of injections.

Some thousands of children die from diphtheria every year in this country. It is up to the parents and guardians in Bury to protect the children in their care from attack by the disease.

Facilities exist for immunisation at The Wylde Clinic, and enquiries can be made at the Clinic, the Public Health Offices, or from the school nurses or health visitors regarding making application for immunisation. The course of immunisation is painless, harmless, and free, and in practically every case grants protection against the disease. Every mother, father, or guardian should realise that it is their moral duty to have the children who are dependent upon them immunised.

An intensified programme of anti-diphtheria immunisation was launched late in 1928, and carried through in subsequent years, in Toronto—a Canadian city with a population about ten times the size of the population of this borough. Through the kindness of the Toronto Public Health Department I have been given these very convincing figures showing how the numbers both of deaths and of cases have declined due to active immunisation:—

Diphtheria Cases.						Diphtheria Deaths.			
			Number	Rate per			Number	Rate per	
				100,000				100,000	
1934	...	...	22	...	3.5	.....	0	...	0.0
1933	...	...	56	...	9.0	.....	5	...	0.8
1932	...	...	168	...	26.8	.....	15	...	2.4
1931	...	...	532	...	84.8	.....	36	...	5.7
1930	...	...	1018	...	163.8	.....	54	...	8.7
1929	...	...	1022	...	168.5	.....	64	...	10.6

These figures speak for themselves, and hardly require any comment. From 1926 to 1928 a certain amount of immunisation was carried out in Toronto, but not in such an intensified form as in later years.

Diphtheria antitoxin, which is used where a case is suspected as having contracted the disease, and in actual cases, and which is quite distinct from the immunising material used to counteract contracting the disease, is supplied to medical practitioners free. A supply is kept at the Health Office and also at the Police Station so as to be available when the Health Office is closed.

Ward Distribution.

	Moorside. East. Church. Redvales. Elton. Unsworth. T'tl						
Cases
Deaths
Removed to Hospital

Enteric Fever (including Paratyphoid Fever).

Cases	3	Deaths	1
-------	-----	-----	-----	-----	---	--------	-----	-----	-----	-----	---

One case died of typhoid fever during the year in hospital. Two cases of paratyphoid fever were notified and removed to hospital, where they made uneventful recoveries. Exhaustive enquiries were made in the one case of typhoid fever in order to

trace the origin of the infection. These enquiries proved nothing conclusive, although it was suspected that the infected material was some oysters consumed by the case. This was not definitely proved, however. The patient was treated by anti-typhoid serum, but unfortunately died. A close watch was kept on the home contacts of the case, and laboratory examinations proved that they had not contracted the disease. Precautions were also taken in the matter of disinfection at the patient's home.

During the past ten years, 1926-1935, the number of cases of enteric fever occurring in the borough have averaged 1.5 per annum.

In 1911, twenty-five cases of enteric fever occurred in this borough, and since that time cases have occurred spasmodically each year, but in no great numbers. Forty years ago the disease was fairly common. Enteric fever has become a rare disease, and although it has not been entirely abolished, the chances of a person contracting it are very few. This is due to the fact that there is eternal vigilance on the part of Public Health Authorities to suppress it. Its decline is also attributed to the fact that we now have better water supplies, milk supplies, and food supplies—brought about through improved sanitary conditions.

Pneumonia.

Cases	139	Deaths	63
--------------	-----	---------------	----

Pneumonia attacks persons of all ages, and is the most prevalent and fatal of all acute diseases. It is an infectious disease, but the infecting organism may be in different guises, making the condition all the more difficult to treat. If the organism causing the infection were known early on in the disease, probably many more cases would be saved. Pneumonia often follows some other disease in the very young and very old, where its incidence is most marked. Organisms causing the disease are most likely carried around by "carriers." These are persons who, although not suffering from the disease themselves infect other persons. A fresh case of pneumonia can be regarded as a focus for the spread of infection, and from that point of view the case, if effectually isolated in hospital soon enough would not be so liable to spread infection, through fewer persons coming in contact with it. As a

measure of prevention, a method of effective immunisation against the disease is being developed, and in this way most safety lies. At the present, careful medical treatment, nursing, and isolation seem to be the only methods of reducing the incidence and mortality.

Measles.

There was a widespread epidemic of measles during the latter part of 1935. Measles is not a notifiable disease, so the number of cases which occurred cannot be assessed with any degree of accuracy. The disease was mild in the majority of cases. Three deaths occurred during the year. During the ten years 1926-1935, the average annual number of deaths was 3.6, and during the previous ten years, 1916-1925, the average number of deaths from measles was 5.3 per annum.

Either the disease is losing its virulence or the population is becoming more immune to more severe forms of the infection.

Whooping Cough.

This, like measles, is not a notifiable disease. There was an epidemic of this disease during the last quarter of 1935. No deaths were caused through this malady.

Influenza.

It is to be regretted that influenza caused 17 deaths in 1935. Most of these cases occurred during the latter part of the year. There was by no means the sign of an impending epidemic at any time, which is something to be thankful for.

The number of deaths each year due to influenza during the last ten years is given as follows:—

1926	8	1931	30
1927	34	1932	14
1928	8	1933	42
1929	37	1934	4
1930	16	1935	17

During the epidemic in 1918, 146 deaths were caused in that year through attacks of the disease, and subsequent complications such as pneumonia.

Cases of influenza are best nursed in the home if the home conditions are suitable. If removed to hospital, there is more chance of complications ensuing.

Many patient years of research by workers all over the world have been devoted in the hope of ultimately finding an effectual agent to deal with this disease, which appears to be so protean or changeable in its manifestations.

Hospital Accommodation.

The hospital accommodation available for cases of infectious diseases whether notifiable or not notifiable is sufficient, and is utilised to the best advantage.

School Notifications of Disease.

The School Medical Officer and the School Nurses visit each school from which intimations of infectious diseases are sent to the Public Health Office.

Bacteriological Examinations.

The following are the particulars of the specimens bacteriologically examined during the year :—

	Positive.	Negative.	Doubtful.	Total.
Swabs for Diphtheria ...	48	... 208	... 1	... 257
Blood for Typhoid Fever..	1	... 14	... —	... 15
Sputum for Tuberculosis	42	... 172	... —	... 214
Faeces for Typhoid Fever	2	... 2	... —	... 4
Miscellaneous Exam'tions	—	... 4	... —	... 4

Disinfection.

The disinfection of clothing, bedding, etc., which has been exposed to infection, is carried out by the Bury and District Joint Hospital Board at the Florence Nightingale Hospital. Infected premises are dealt with by the Health Department.

A summary of disinfection carried out during the year will be found on page 46.

Fluid disinfectant in bottles suitably labelled with instructions for use is supplied on application to occupiers of houses in which a case of infectious disease has occurred. Disinfectant is also supplied by the Health Department for use in the Elementary and Secondary Schools.

Table A.—Incidence of Notifiable Infectious Diseases (excluding Tuberculosis), Age Grouping, Ward Distribution, Cases Removed to Hospital, and Deaths during the Year 1935.

NOTIFIABLE DISEASES.	Total Cases Notified in Whole District.														Deaths of Notifi'd Cases.						
	At all Ages.	At Ages																			
		Under 1	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45	45-65	Over 65								
Smallpox .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
Diphtheria.....	135	..	2	4	8	10	64	27	9	11	..	..	..	27	55	11	21	20	1	134	..
Erysipelas	31	..	..	..	..	..	..	..	1	8	3	12	7	5	9	3	5	9	..	14	..
Scarlet Fever	264	1	2	14	18	31	139	35	10	10	3	1	..	37	56	20	41	104	6	228	..
Enteric Fever	3	..	..	..	..	..	..	..	..	1	..	2	..	..	..	..	..	3	..	3	1
Ophthalmia	13	13	..	..	..	..	..	..	..	..	..	..	..	1	4	4	2	2	..	..	..
Puerperal Fever	7	..	..	..	..	..	..	..	1	4	2	..	..	2	3	2	..	..	..	1	..
Puerperal Pyrexia	6	..	..	..	..	..	..	..	..	6	..	..	..	2	2	..	..	2	..	..	..
Pneumonia	139	4	3	1	3	3	13	4	11	30	16	36	15	25	27	12	28	46	1	..	63
Totals.....	598	18	7	19	29	44	216	66	32	70	24	51	22	99	156	52	97	186	8	380	72

Table B. -Total Deaths from Infectious Diseases (notifiable and not notifiable) during the year 1935

Disease.	Deaths at All Ages.	Deaths at Age Periods:—											
		Undr 1	1—2	2—3	3—4	4—5	5—10	10—15	15—20	20—35	35—45	45—65	Over 65
Scarlet Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria and Membranous Croup	8	...	..	1	2	1	3	1	...	...	...	...	...
Measles	3	1	1	1	...	...	...	...	...	...	...	...	...
Whooping Cough	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza.....	17	...	...	...	...	...	...	...	2	5	8	...	2
Puerperal Fever & Puerperal Pyrexia	2	...	...	...	...	...	...	...	...	2	...	...	...
Pneumonia.....	63	8	...	...	1	...	...	...	3	6	12	14	19
Enteric Fever ...	1	...	...	...	...	...	...	...	...	...	...	1	...
Totals.....	94	9	1	2	3	1	3	1	5	13	20	15	21

Table C.—Showing the number of cases of Infectious Disease notified from 1916 to 1935.

DISEASE.	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Smallpox	1	..	..	..	..	..	..	..	..	..	..	..	51	6	2	..	..	..	..	..
Scarlet Fever....	112	85	50	27	76	138	185	139	132	177	121	160	90	121	102	56	42	61	164	264
Diphtheria and Membran'us Group	48	165	114	115	74	49	46	56	50	69	66	81	94	167	46	20	31	95	90	135
Enteric Fever....	5	7	5	7	1	1	1	4	1	..	..	..	3	4	4	..	..	1	..	3
Continued Fever.	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..
Puerperal Fever..	2	4	2	3	6	7	7	3	1	4	3	6	3	7	5	4	5	7	10	7
*PuerperalPyrexia	..	..	..	..	..	..	..	..	..	..	..	6	3	6	4	5	5	4	8	6
Erysipelas	29	18	16	28	25	20	22	28	20	29	28	31	25	24	30	26	20	25	23	31
†Chickenpox	223	103	138	97	190	237	181	189	331	359	367	270	309	402	547	252	347	62	..	..
Poliomyelitis ....	..	..	..	..	1	..	..	..	1	..	..	1	1	..	..	..	1	..	..	..
Cerebro-Spinal Fr	..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	1	..
Encephalitis Lethargica	..	..	..	..	1	2	..	3	11	3	1	3	..	3	3	1	..	..	..	..
Ophthalmia Neonatorum.	22	21	6	11	12	14	17	6	8	13	9	11	7	11	7	6	10	12	8	13
‡Pneumonia ...	..	..	..	149	53	45	160	205	108	161	107	164	91	159	122	113	77	99	105	139
‡Malaria .....	..	..	..	23	10	2	..	..	1	..	..	..	..	..	..	..	1	..	..	..
‡Dysentery .....	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
TOTALS.....	442	403	331	462	449	515	619	633	664	815	703	735	678	910	872	483	539	367	410	598

† Notifiable on March 29th, 1916, to March 31st, 1933.

‡ Made notifiable Mar. 1st, 1919.

* Made notifiable on October 1st, 1926.

SECTION 6.

Tuberculosis.

TUBERCULOSIS.**Incidence and Death Rates.**

In 1935 thirty-four cases of Pulmonary Tuberculosis and twenty-six cases of other tuberculous diseases were notified. Notification of tuberculosis in Bury was efficient.

The following table shows the number of new cases and deaths from Tuberculosis during the year :—

AGE PERIODS.	NEW CASES during 1935.				Deaths during 1935.			
	Respiratory.		Non-Respiratory.		Respiratory.		Non-Respiratory.	
	Male	Female	Male	Female.	Male	Female.	Male	Female.
0—1 year.	—	—	—	—	—	—	—	—
1—5 years.	—	—	4	1	—	—	1	—
5—10 „	—	1	2	5	—	—	—	3
10—15 „	—	—	3	—	—	—	—	—
15—20 „	—	2	1	1	1	2	2	—
20—25 „	3	2	—	2	1	1	—	—
25—35 „	2	3	—	4	5	2	—	1
35—45 „	5	1	—	—	1	1	—	—
45—55 „	1	1	1	1	4	1	—	2
55—65 „	5	2	—	—	5	—	—	—
65 and upwards	4	2	1	—	3	2	—	—
Totals	20	14	12	14	20	9	3	6

The death rate recorded for Respiratory or Pulmonary Tuberculosis for 1935 is 0.48 per 1,000 persons living, and is next to the lowest ever recorded in the borough. The lowest rate was 0.45 per 1,000 recorded in 1932. The death rate for non-respiratory or other tuberculous diseases is 0.16 per 1,000 for 1935.

The thirty-four cases of Pulmonary Tuberculosis notified in the year under review is the lowest number ever notified in Bury. This can be seen from the following table which gives the numbers of cases notified and the death rates per 1,000 for each year for the last twenty-five years:—

TUBERCULOSIS 1911-1935.

Year	Pulmonary Tuberculosis		Other Tuberculous Diseases	
	No. of cases notified	Death rate per 1,000 pop.	No. of cases notified	Death rate per 1,000 pop.
1911	27	0·97	32	0·44
1912	91	1·30	48	0·44
1913	124	1·01	59	0·32
1914	99	1·09	30	0·39
1915	120	1·39	26	0·33
Average for 5 years...	—92	—1·13	—39	—0·38
1916	105	0·91	33	0·39
1917	91	1·44	28	0·17
1918	98	1·27	25	0·31
1919	69	0·89	17	0·37
1920	68	0·83	28	0·25
Average for 5 years...	—86	—1·07	—26	—0·30
1921	52	0·89	40	0·22
1922	43	0·61	36	0·26
1923	53	0·94	18	0·09
1924	72	0·79	26	0·14
1925	72	0·97	32	0·19
Average for 5 years...	—58	—0·84	—30	—0·18
1926	63	0·59	41	0·23
1927	70	0·81	47	0·21
1928	62	0·72	23	0·14
1929	47	0·65	32	0·16
1930	52	0·60	26	0·23
Average for 5 years...	—58	—0·67	—34	—0·19
1931	42	0·76	20	0·13
1932	45	0·45	16	0·18
1933	40	0·51	21	0·15
1934	52	0·63	29	0·20
1935	34	0·48	25	0·16
Average for 5 years...	—42	—0·56	—22	—0·16

*Notification voluntary in 1911. Compulsory from 1912 onwards.

Five-year averages are indicated in the table since such periods can be considered fair ones for comparison. On perusal of the

table it can be seen that the average number of cases notified and the average death-rate for the last five years are the lowest recorded for both pulmonary tuberculosis and other tuberculous diseases.

It can also be observed that the death rate from tuberculous diseases in general has been halved during the last quarter century. There has also been a big fall in the number of cases notified. Allowing for the fallibility of statistics this shows that the disease is being overcome. To what is this due? The institution of Tuberculosis Dispensaries, the segregation and isolation of infective patients in sanatoria and hospitals to limit the spread of the infection have played a part in the reduction. Other factors such as the improved general nutrition of the people in recent years and the better control in dangerous trades of dust and injurious materials which when inhaled pre-dispose to the disease have helped to combat the spread of the disease and reduce the death rate.

Satisfactory as the decrease is so far, much remains to be done to lower the rates still further.

Improved environmental conditions of the people such as is now resulting from slum clearance and the decrowding of overcrowded families will certainly aid in the further reduction.

Since tuberculosis is a disease in the main part associated with poverty, general improvement in economic factors will always be a potent factor in raising the standard of living and reducing the Tuberculosis rate. During the late war the death rate from Tuberculosis doubled in certain towns in Germany. This was due to malnutrition of the inhabitants consequent upon the lack of essential foodstuffs.

Many cases of Tuberculosis of the bones and joints can be avoided if pasteurised milk or milk from tuberculin tested cows is used.

As to how Bury compares with the rest of the country regarding the disease in general can be seen from the following table:—

**Annual Death Rate from Tuberculosis (all forms),
Bury and England and Wales, 1925-35.**

Year.	Rate per 1,000 population.	
	Bury.	England and Wales.
1926	0.82	0.96
1927	1.02	0.97
1928	0.86	0.93
1929	0.81	0.96
1930	0.83	0.89
1931	0.89	0.89
1932	0.63	0.83
1933	0.66	0.82
1934	0.83	0.76
1935	0.64	0.71

THE TUBERCULOSIS DISPENSARY.

Premises.—The Tuberculosis Dispensary is situated at The Wylde and is a consultative centre, a sorting house and an advisory centre. A certain amount of treatment is given by artificial light therapy in the treatment of tubercular glands.

The premises are so situated that there is very little interference from noise and as quiet greatly aids the correct interpretation of chest signs by the Tuberculosis Officer this is satisfactory. The rooms are well ventilated, adequately lit and heated.

Staff.—The staff in 1935 consisted of Dr. G. M. Davidson Lobban, Chief Tuberculosis Officer, and Dr. J. S. Drummond, Tuberculosis Officer.

Reorganisation of the Dispensary.

Sessions.—Until 2nd April, 1935, one dispensary session only from 10-0 a.m. to 12-0 noon on Tuesdays was held at The Wylde for all cases and contacts. Since that date one extra session from 10-0 a.m. to 12-0 noon on Thursdays was introduced principally

for the examination of contacts. This remained throughout the year. Owing, however, to the increase in the number of contacts to be examined early in 1936 another extra session from 2-0 to 5-0 p.m. on Friday afternoons has had to be added. The latter session is also used for the examination of cases of Tuberculosis of bones and joints.

Contacts.—Tuberculosis being undoubtedly a contact disease, most cases obtain the disease from others who have it; it is most important that as many contacts as possible should be examined. In fact all contacts ought to undergo examination in order to satisfy themselves and their relatives that they are free from the infection. It was found, however, that these cases were very reluctant to be examined. In most cases the aversion arose principally through the fear the contacts had of the disease being discovered.

At the end of 1934 a definite drive was made towards examining as many contacts as possible. For a time things went well and a fair number were examined. Reaction set in, however, and the numbers dropped off, until the beginning of 1936, when the number submitting themselves for examination was satisfactory. So far a satisfactory number is being examined. The following table gives the number of contacts examined during the last ten years :—

Year.	Number of Contacts Examined.
1926	101
1927	43
1928	33
1929	14
1930	8
1931	11
1932	3
1933	13
1934	76
1935	39

Contacts are examined by the ordinary methods. The tuberculin skin reaction test, which is quite harmless, painless and easy of application, is also included as a routine test.

Home Visits.—The Tuberculosis Officer and the Tuberculosis Nurse visit the homes of cases and contacts. This is necessary in order to get a true picture. During 1935 patients in unsuitable houses were given accommodation where environmental conditions were improved.

The Tuberculosis Officer also examined cases frankly unfit for removal and contact cases who were reluctant to attend the Dispensary at their own homes. He devoted two half-day sessions a week in 1935 to this branch of the work. Since the beginning of 1936 only one half-day session per week has been given to home visiting by the doctor. This is due to the fact that contacts have been presenting themselves in satisfactory numbers at the dispensary. Nevertheless home visiting has been much increased since 1933.

Sputum Examinations.—The examination of a patient's "spit" is one of the fundamental principles in tuberculosis work. A single specimen is not of much value. Repeated sputum examinations of a patient saves much valuable time and may mean a great deal of difference to his or her future welfare. Here again contacts viewed this procedure with grave suspicion. Many specimen bottles issued to obtain the necessary "spit" were not returned during 1935. The numbers examined in 1934 and 1935, however, showed a big increase over those in previous years. It is satisfactory to note that there has not been the same difficulty in obtaining specimens since the early part of 1936.

X-Ray Examinations.—For an early diagnosis of a case of Tuberculosis an X-ray examination is essential. X-rays reveal the condition much earlier than ordinary examinations by even the most competent physicians. The earlier condition is revealed the much better chance there is of a cure. The years 1934 and 1935 have seen a great increase in this work, and the 1936 promises a bigger increase. The unwillingness on the part of contacts to undergo this examination was marked in 1935. Prejudice, however, is being overcome.

Dental Treatment.—This was instituted for tubercular patients in April, 1935, at the Dental Clinic at The Wylde. There is no doubt that the patients were much improved by the treatment or

by the provision of dentures. Four patients received treatment. In one case the cost of dentures was defrayed by the Corporation.

Treatment of Tuberculosis.—Institution treatment is given to cases of Pulmonary Tuberculosis at the Bury and District Joint Hospital Board's Institution (the Aitken Sanatorium at Holcombe, near Bury), and at the Jericho Hospital. Children suffering from Pulmonary Tuberculosis are sent to the Liverpool Open-air Hospital for Children, Leasowe, the Oubas House Children's Sanatorium, near Ulverston (for girls only), and Shelf Sanatorium, Halifax.

Cases of Non-Pulmonary Tuberculosis are treated at the Bury Infirmary, the Manchester and Salford Hospital for Diseases of the Skin, and the Robert Jones and Agnes Hunt Orthopædic Hospital. Non-pulmonary cases are also sent when necessary to the Manchester Royal Infirmary, and in special instances to the Papworth Village Settlement, near Cambridge. Beds for male adults suffering from Non-pulmonary Tuberculosis may also be used at the Wroughtington Hospital, near Wigan.

The number of patients treated at the various institutions, together with the patient days during 1935, are as follows:—

Institutions.	No of patients (Undischarged at end of 1934 and admitted during 1935).		No of patient days.
Aitken Sanatorium	40	.....	6,469
Bury Infirmary	10	.....	424
Agnes Hunt and Robert Jones Orthopædic Hospital, Oswestry	4	.....	878
Jericho Hospital	1	.....	2
Liverpool Open-air Hospital for Children, Leasowe	7	.....	1,688
East Lancashire Tuberculosis Colony, Great Barrow, near Chester... ..	1	.....	286
David Lewis Northern Hospital, Liverpool	1	.....	25
Shelf Sanatorium, Halifax	2	.....	199
Papworth Village Settlement	1	.....	70

Manchester and Salford Hospital for Skin Diseases:—

Out-patients ... 5 Out-patient attendances ... 27.

The number of patients receiving sunlight treatment during the year was as follows :—

Institution.	No of patients.	No. of attendances.
The Wylde, Sunlight Clinic	29	..... 324
The Bury Infirmary	13	..... 346
The Manchester and Salford Hospital for Skin Diseases	1	..... 87

Alterations at the Aitken Sanatorium.—Alterations and additions to the sanatorium buildings were completed in 1935 and new equipment provided. The total cost amounted to between £19,000 and £20,000.

The alterations consisted of chiefly a re-arrangement and adaptation of the old building to form administrative offices and more commodious wards. The additions were two new wings constructed of ferro-concrete. One new wing is of three storeys with balconies. The other new wing consists of two storeys with a large sun porch. In the larger wing the new and additional features are an X-ray room and waiting room, an operating theatre, a dark room, and a laboratory.

The Nurses' quarters have received more room space by the re-arrangement, and the kitchen is much more commodious and is now provided with a large refrigerator.

The chief items of equipment are an X-ray apparatus, screening stand, and X-ray couch. The accommodation now provided is for 70 beds. Owing to the much-needed expansion having taken place there is more ease of working of the sanatorium.

After Care.

This is a very important branch of the work. Patients are given additional nourishments. In 1935 thirteen patients were granted extra nourishments by the Corporation. In all fourteen grants were made comprising altogether 231 gallons of milk and 1,313 eggs.

Patients discharged from sanatorium are kept in touch by our nurses and the tuberculosis officer by visitation at their homes. The patients also attend the dispensary for regular examinations. Employers were got in touch with regarding finding discharged

patients suitable occupation. Various house owners were approached in order to obtain improved accommodation for persons who had completed their sanatorium treatment.

We have to thank the Bury Charity Organisation Society, whose Secretary has supplied the following information:—During 1935 the Society has helped 25 tuberculosis patients by grants of food, clothing, etc. In ten cases nourishments have been provided free, in five cases clothing has been given, in eight cases clothing and nourishment, in one case appliances and nourishments, and in another case assistance with travelling expenses for convalescence has been given.

Domiciliary Treatment.

Panel doctors recommend insured persons unable to undergo sanatorium treatment and cases discharged from sanatorium or hospital for domiciliary treatment. The doctors give the recommendation to this office in the first instance, and subsequently send quarterly reports on the patients' condition. In 1935 seventy persons received domiciliary treatment, and at the end of the year 62 insured persons were still receiving treatment. One hundred and forty-three quarterly reports were sent in regarding the patients under domiciliary treatment.

Public Health (Prevention of Tuberculosis) Regulations, 1925.

No case of Tuberculosis among employers in the milk trade was notified during the year, no action in this respect, therefore, being necessary.

Public Health Act, 1925, Section 62.

It has not been necessary in any case to apply for an order for compulsory removal to hospital during the year.

TUBERCULOSIS SCHEME.

Form T. 145.

(A.) Return showing the work of the Dispensary during the year 1935.

DIAGNOSIS.	PULMONARY.				NON-PULMONARY.				TOTAL.				GRAND TOTAL.
	Adults.		Children		Adults.		Children		Adults.		Children		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
A —NEW CASES examined during the year (excluding contacts):													
(a) Definitely tuberculous	18	11	—	1	2	7	7	2	20	18	7	3	48
(b) Diagnosis not completed ..	—	—	—	—	—	—	—	—	—	—	—	—	—
(c) Non-tuberculous	—	—	—	—	—	—	—	—	3	12	3	1	19
B.—CONTACTS examined during the year :													
(a) Definitely tuberculous	—	—	—	—	—	—	—	—	—	—	—	—	—
(b) Diagnosis not completed ..	—	—	—	—	—	—	—	—	—	—	—	—	—
(c) Non-tuberculous.....	—	—	—	—	—	—	—	—	8	11	8	12	39
C.—CASES written off the Dis- pensary Register as													
(a) Recovered	5	1	—	—	1	4	2	2	6	5	2	2	15
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous	—	—	—	—	—	—	—	—	12	24	11	13	60
D.—NUMBER OF CASES on Dispen- sary Register on Dec. 31st :													
(a) Definitely tuberculous	58	52	3	2	17	32	21	17	75	84	24	19	202
(b) Diagnosis not completed ..	—	—	—	—	—	—	—	—	—	—	—	—	—

1. Number of cases on Dispensary Register on January 1st	213	7. Number of consultations with medical practitioners :—	
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years	4	(a) Personal..	8
3. Number of cases transferred to other areas, cases not desiring further assistance under the Scheme, and cases “lost sight of.”	13	(b) Other	48
4. Cases written off during the year as Dead (all causes)	33	8. Number of visits by Tuberculosis Officers to Homes (including personal consultations)	184
5. Number of attendances at the Dispensary (including Contacts)	416	9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes	750
6. Number of Insured Persons under Domiciliary Treatment on the 31st December....	62	10. Number of	
		(a) Specimens of sputum, &c., examined	91
		(b) X-ray examinations made in connection with Dispensary work..	97
		11. Number of “Recovered” cases restored to Dispensary Register and included in A (a) and A (b) above	2
		12. Number of “T.B. plus” cases on Dispensary Register on Dec. 31st.	46

(B) Number of Dispensaries for the Treatment of Tuberculosis

Provided by the Council One
 Provided by Voluntary Bodies None

C.) Number of Beds available for the Treatment of Tuberculosis on the 31st December in Institutions belonging to the Council.

The Council has no Institution of its own for the treatment of tuberculosis but retains beds for this purpose as follows :—

Name of Institution.	For Pulmonary Cases.		For Non-Pulmonary Cases.		Total.
	Adults.	Children under 15	Adults.	Children under 15	
The Aitken Sanatorium, Holcombe.....	20	—	—	—	20
Bury Infirmary	—	—	1	1	2
The Robert Jones and Agnes Hunt Orthopædic Hospital, Oswestry	—	—	1	1	2
The Manchester & Salford Hospital for Diseases of the Skin	—	—	when required	when required	—
The Liverpool Open-Air Hospital for Children, Leasowe	—	1	—	1	2

(D.) Return showing the extent of Residential Treatment during the year 1935.

		In Institutions on January 1st.	Admitted during the Year.	Discharged during the Year.	Died in the Institutions.	In Institutions on December 31st.
Number of doubtfully Tuberculous cases admitted for observation.	Adult Males ...	—	—	—	—	—
	Adult Females.	—	—	—	—	—
	Children.....	—	—	—	—	—
	Total ...	—	—	—	—	—
Number of Patients suffering from Pulmonary Tuberculosis.	Adult Males ...	12	11	6	8	9
	Adult Females.	8	11	12	2	5
	Children.....	—	1	1	—	—
	Total...	20	23	19	10	14
Number of Patients suffering from Non-Pulmonary Tuberculosis.	Adult Males ...	1	4	3	—	2
	Adult Females.	—	2	1	—	1
	Children.....	3	15	12	1	5
	Total...	4	21	16	1	8
Grand Total.....		24	44	35	11	22

Return showing the immediate results of treatment of definitely tuberculous patients discharged during the year 1935 from Institutions approved for the treatment of Tuberculosis.

Classification on admission to the Institution.	Condition at time of discharge.	Duration of Residential Treatment in the Institution.												GRAND TOTAL				
		Under 3 months but exceeding 28 days			3—6 months.			6—12 months.			More than 12 months.				TOTALS.			
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.		M.	F.	Ch.	
PULMONARY TUBERCULOSIS.	Class T.B. minus.	Quiescent..	1	1	1	..	1	2	2	..	4
		Not quiescent .. ..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1
		Died in Institution .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Class T.B. plus Group 1.	Quiescent..	1	..	1	..	1	1	1	1	3
		Not quiescent	1	1	2	..	2
		Died in Institution	1	1	2	2
	Class T.B. plus. Group 2.	Quiescent..	1	1	..	1
		Not quiescent	1	1	..	1	3	..	2	4	..	6
		Died in Institution	1	1	2	2
	Class T.B. plus. Group 3.	Quiescent..
		Not quiescent	1	1	1
		Died in Institution	1	1	1	1	..	2
Totals (Pulmonary)		3	3	..	1	1	1	2	3	..	5	5	..	11	12	1	26	
NON-PULMONARY TUBERCULOSIS.	Bones and Joints.	Quiescent .. ..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	1
		Not quiescent .. ..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1
		Died in Institution .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Abdominal.	Quiescent .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Improved, not quiescent .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Died in Institution .. ..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	1
	Other Organs.	Quiescent.. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Improved, not quiescent .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Died in Institution .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Peripheral Glands.	Quiescent	2	1	3	..	3
		Improved, not quiescent .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Died in Institution .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals (Non-pulmonary) .. ..		..	..	1	..	..	3	1	..	1	..	..	..	1	..	5	6

SPECIAL REPORT.

The following is a summary of a Special Report sent to the Ministry of Health in the early part of 1936, and it indicates the results of the re-organisation of the Tuberculosis Department:—

After Re-organisation.**Previous to Re-organisation.****Clinic Sessions.**

Tuesday, 10 a.m. to 1 p.m. New cases
Thursday, 10 a.m. to 1 p.m. Contacts
Friday, 2 p.m. to 5 p.m. Contacts and bone and joint cases.

Only one session was devoted to all cases.

Home Visiting.

The Tuberculosis Officers devote one half-day per week—about 80 home visits paid in three months.

No sessions were devoted to home visiting, but between 40 and 50 home visits were paid per annum.

Contacts.

The number being examined is at the rate of 30 per three months.

Small number only examined—an average of 20 per annum.

Consultations with doctors.

The number is about 30 per three months.

The number was between 30 and 40 per annum.

Sputum Examinations.

60 to 70 performed in three months.

The number examined was between 40 and 50 per annum.

X-Ray Examinations.

60 to 80 performed in three months.

Seldom performed.

Home Visiting by Nurses.

500 visits made in three months.

About 1,000 visits paid in one year.

Milk Examined for Tuberculosis.

The number is 30 for three months.

About 30 examined per annum.

Dental Treatment is now provided for Tubercular patients.

None was provided before.

The arrangements made in November, 1934, for the provision of beds for advanced cases of Tuberculosis at Jericho Public Assistance Hospital still exist. There is every indication of the progress now made following the reorganisation being maintained.

SECTION 7.
Venereal Diseases.

VENEREAL DISEASES.

Previous to April 2nd, 1935, the Clinic for the treatment of Venereal Disease was held twice weekly at the Joint Clinics at The Wyldc—Tuesday, 6-30 to 8-30 p.m., for females; and Friday, 6-30 to 8-30 p.m. for males. Inter-clinic irrigation of male patients was provided from Monday to Friday at 6-30 to 8-30 p.m., except on Tuesday, when the time was 8-30 to 9-30 p.m. The Medical Officer in charge was Dr. J. Holker, of Manchester, and Dr. J. S. Drummond acted as Assistant Medical Officer.

After April 2nd of the year under review the Clinic was entirely re-organised. Dr. Drummond, the Deputy Medical Officer of Health, became Senior Assistant Medical Officer in charge of the Clinic, and Dr. P. Morton, a new addition to the staff at this time, became Second Assistant Medical Officer at the Clinic. Dr. Lobban, the Medical Officer of Health, continued as Chief Venereal Diseases Officer. Dr. Holker relinquished his appointment at the end of March.

The Clinic was completely re-constructed. A new waiting-room for women was added, with the necessary heating, lighting, and sanitary accommodation. Previously the male and female patients used a common waiting-room, but not at the same time. A new cubicle system for the diagnosis and treatment of patients was introduced. No such system was in being before the re-organisation. Two new cubicles were erected on the female side and three new cubicles were erected on the male side. A new laboratory was also constructed to afford facilities for the preparation, staining, and examination of many specimens, and this obviated sending them elsewhere for examination and report. The greatest improvement made was the complete separation of the male side from the female side, including a separate new entrance for the female patients. The lighting in both sections was entirely altered to facilitate its optimum use in aiding diagnosis and treatment.

Clinic sessions were increased in number and re-organised as follows :—

Consultation Clinics

Females.

Tuesday ... 6-30 to 8-30 p.m.
Thursday ... 2-0 to 5-0 p.m.
Friday... ... 8-30 to 9-30 p.m.

Males.

Tuesday ... 8-30 to 9-30 p.m.
Friday... ... 6-30 to 8-30 p.m.
Saturday 10 a.m. to 1-0 p.m.

Intermediate Clinics.

Monday, Wednesday, and
Saturday... 9-15 to 10-15 a.m.
Tuesday ... 6-30 to 8-30 p.m.
Friday ... 8-30 to 9-30 p.m.

Monday, Wednesday, Thurs-
day, Friday 6-30 to 8-30 p.m.
Tuesday ... 8-30 to 9-30 p.m.
Saturday 10-0 a.m. to 1-0 p.m.

This part of the re-organisation was appreciated by patients since times have been made to suit nearly all classes, and the overcrowding at Clinics which was a feature before the re-organisation has been abolished.

The number of new cases in 1935 was 288, an increase of 6 as compared with the previous year. The out-patient attendances numbered 11,355, and were 3,630 higher than last year. The number of injections of arsenobenzene compounds given was 2,036, as compared with 1,551. The out-patient attendances (11,355) include 2,667 male and 9332 female inter-clinic irrigation attendances. The average yearly out-patient attendances for the five years 1931-35 is 7,567, and the average yearly number of new cases for the same period is 245.

The medical practitioners of the town and surrounding districts are aware of the new facilities provided for the diagnosis and treatment of Venereal Diseases at the Clinic.

The number of medical practitioners qualified to receive free supplies of arsenobenzene compounds for use in their private practice was four.

During the year pathological specimens were sent to the Public Health Laboratory, Manchester, for examination as follows :—

	(a) For the Wasserman Test (i.) Blood. (ii.) C.S.F.		(b) For Gonococcus
From the Venereal Diseases Clinic	727	—	...194
„ medical practitioners in the Borough	149	—	... —
„ Bury Infirmary... ..	84	—	... —
„ Jericho Institution... ..	45	4	... —
„ Florence Nightingale Hospital... ..	2	—	... —
„ Ante-Natal Clinic	4	—	... —

The following tables give full particulars of the work carried out under the Venereal Diseases Scheme :—

1.—New Cases, Consultations, Intermediate Attendances, and Pathological Examinations at Venereal Diseases Clinic, 1931-35.

Year.	New Cases.	Consultations by Medical Officer at Clinic.	Attendances at Clinic for intermediate treatment.	Pathological specimens examined by M.O. at Clinic.
1931	181	4596	923	185
1932	243	4040	2556	0
1933	231	4459	2173	72
1934	282	5859	1830	364
1935	288	7786	3569	618

As a means towards helping the re-organisation patients were impressed in 1934 of the need for increased Clinic attendances. It is evident that full fruition of a re-organisation of this kind could not be accomplished in a few months and could not be brought to the satisfactory state it is now in, unless a good deal of planning some considerable time ahead was made.

VENEREAL DISEASES.

RETURN relating to all persons who were treated at the Treatment Centre at Bury during the year ended the 31st December, 1935.

	Syphilis.		Soft Chancre.		Gonorrhœa.		Conditions other than Venereal		Total.		Total
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
1. Number of cases on 1st January under treatment or observation.....	142	73	2	..	101	27	23	8	268	108	376
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection.....	9	1	..	..	12	..	..	..	21	1	22
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from :—											
Syphilis, Primary	21	4	..	..	..	..	..	..	21	4	25
,, Secondary	11	7	..	..	..	..	..	..	11	7	18
,, Latent in first year of infection	3	4	..	..	..	..	..	..	3	4	7
,, All later stages	8	14	..	..	..	..	..	..	8	14	22
,, Congenital	3	4	..	..	..	..	..	..	3	4	7
Soft Chancre .....	..	..	3	..	..	..	..	..	3	..	3
Gonorrhœa, first year of infection .....	..	..	..	..	91	25	..	..	91	25	116
,, later .....	..	..	..	..	1	2	..	..	1	2	3
Conditions other than Venereal .....	..	..	..	..	..	..	59	23	59	23	82
4. Number of cases dealt with for the first time during the year under report known to have received treatment at other Centres for the same infection..	2	1	..	..	1	1	..	..	3	2	5
Totals of Items 1, 2, 3 and 4.....	199	108	5	..	206	55	82	31	492	194	686
5. Number of cases discharged after completion of treatment and final tests of cure	28	4	3	..	17	3	28	18	76	25	101
6. Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from —											
Syphilis, Primary	14	..	..	..	..	..	..	..	14	..	14
,, Secondary	13	5	..	..	..	..	..	..	13	5	18
,, Latent in first year of infection	..	5	..	..	..	..	..	..	..	5	5
,, All later stages	6	9	..	..	..	..	..	..	6	9	15
,, Congenital	2	7	..	..	..	..	..	..	2	7	9
Soft Chancre .....	..	..	..	..	..	..	..	..	..	..	..
Gonorrhœa, first year of infection .....	..	..	..	..	63	16	..	..	63	16	79
,, Later .....	..	..	..	..	4	1	..	..	4	1	5
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure	13	16	..	..	43	5	..	..	56	21	77
8. Number of cases transferred to other Centres or to Institutions, or to care of private practitioners	2	..	..	..	5	..	..	..	7	..	7
9. Number of cases remaining under treatment or observation on 31st December	121	62	2	..	74	30	54	13	251	105	356
Totals of Items 5, 6, 7, 8 and 9 ..	199	108	5	..	206	55	82	31	492	194	686

RETURN relating to VENEREAL DISEASES—Continued.

	Syphilis.		Soft Chancre		Gonorrhoea.		Conditions other than Venereal.		Totals.		Totals
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
Number of cases in the following stages of Syphilis included in Item 6 which failed to complete one course of treatment,											
Syphilis, Primary	8	..	..	..	..	..	..	..	8	..	8
„ Secondary	7	2	..	..	..	..	..	..	7	2	9
„ Latent in first year of Infection ..	..	2	..	..	..	..	..	..	..	2	2
„ All later stages	5	1	..	..	..	..	..	..	5	1	6
„ Congenital	2	5	..	..	..	..	..	..	2	5	7
Number of attendances ;											
(a) for individual attention of the Medical Officer.....	2452	2132	28	..	2039	604	301	230	4820	2966	7786
(b) for intermediate treatment, e.g., irrigation, dressing	223	1	..	..	2189	839	255	62	2667	902	3569
Total attendances	2675	2133	28	..	4228	1443	556	292	7487	3868	11355
In-patients :—											
(a) Total number of persons admitted for treatment during the year ..	..	..	..	..	..	..	..	..	..	..	..
(b) Aggregate number of “ in-patient days ” of treatment given .....	..	..	..	..	..	..	..	..	..	..	..
	Under 1 year		1 and under 5 years.		5 and under 15 years.		15 years and over.		Totals.		
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
Number of cases of Congenital Syphilis in Item 3 above, classified according to age periods .....	..	..	..	..	1	2	2	2	3	4	
Chief preparations used in treatment of Syphilis :—	Arsenobenzene Compounds.				Mercury.				Bismuth.		
	Stabilarsan-Sulphostab.				..				Chlorostab		
	2036				..				2400		

RETURN relating to VENEREAL DISEASES—Continued.

15. Are the tests recommended in Memo. V 21 as amended by Memo. V 21a followed in deciding as to the discharge of the patient after treatment and observation for Syphilis and Gonorrhœa?	Yes except culture test.				
If not, in what way are they modified?	—				
	Microscopical.		Serum Tests.		
	For Spirochetes.	For Gonococci	Wasserman.	Others for Syphilis	For Gonorrhœa
16. Pathological Work:— (a) Number of specimens examined at and by the Medical Officer of the Treatment Centre	56	562	..	..	..
(b) Number of specimens from patients attending at the Centre sent for examination to an Approved Laboratory .....	..	..	741	..	204

STATEMENT showing the services rendered at the Treatment Centre during the year, classified according to the areas in which the patients resided.

Name of County or County Borough (or Country in the case of persons residing elsewhere than in England and Wales):—	Bury.	Lancashire C.C.	Rochdale.	Bolton.	Glasgow	Salford.	Tot.
A. Number of cases in Items 3 and 4 from each area found to be suffering from:—							
Syphilis	50	29	3	..	..	..	8
Soft Chancre.....	2	1	..	..	..	..	..
Gonorrhœa	63	57	..	..	1	..	12
Conditions other than venereal.....	56	26	..	..	..	..	8
Total.....	171	113	3	..	1	..	28
B. Total number of attendances of all patients residing in each area.....	7026	4043	208	68	1	9	1138
C. Aggregate number of "In-patient days" of all patients residing in each area.....	..	..	..	..	..	..	..
D. Number of doses of arsenobenzene compounds given in the Out-patient Clinic and In-patient Department to patients residing in each area ..	1216	765	47	4	..	4	203

SPECIAL REPORT.

The following is a summary of a report sent to the Ministry of Health in the early part of 1935, and of a report sent in the early part of 1936, regarding the re-organisation of the Venereal Diseases Clinic at The Wylde:—

Consultations Clinics.

After Re-organisation.	Before Re-organisation.
Tuesday : 6-30 p.m. to 8-30 p.m. (females).	Tuesday : 6-30 p.m. to 8-30 p.m. (males).
8-30 p.m. to 9-30 p.m. (males).	Friday : 6-30 p.m. to 8-30 p.m. (females).
Thursday : 2 p.m. to 5 p.m. (females).	
Friday : 6-30 p.m. to 8-30 p.m. (males).	
8-30 p.m. to 9-30 p.m. (females).	
Saturday : 10 a.m. to 1 p.m. (males).	

Intermediate Clinics.

Every week-day for males and females except Sunday.	Once weekly for women; five times weekly for men.
---	---

Overcrowding at Clinics complained of previous to the re-organisation has been obviated by the increased number of sessions and the assigning to each patient a specified time to attend. The male side was completely shut off from the female side, and a separate entrance was made for female patients. A new waiting-room was constructed for female patients. Cubicles were constructed in the male and female side, and new tables and stools provided for each cubicle. A new laboratory was constructed and the artificial lighting provided at the Clinic was rearranged and improved. A metal table was installed for use in diagnosis and treatment. The facilities for diagnosis and treatment have been greatly improved.

SECTION 8.

Maternity and Child Welfare.

MATERNITY AND CHILD WELFARE.

Health Visiting.—There are five lady Health Visitors, four of whom are detailed to special areas. The fifth confines her visits to infectious diseases and tuberculosis, and is in attendance in rotation along with the other Health Visitors at the Maternity and Child Welfare Clinics.

Upon the notification of a birth under the Notification of Births Act, 1907, a Health Visitor calls at the home as soon as possible to make enquiries regarding environment, food, etc. Should no doctor be in attendance, advice is given regarding general hygiene. Subsequent visits are made at intervals until the child attains school age. The frequency of the visits diminishes as the child grows older. At the age of five the child comes under the supervision of the School Medical Officer.

The total number of births notified under the Act, as adjusted by transferred notifications, was 731 (live births 689; still births 42), or 79.3 per cent. of the total live and still births registered. The number of notifications received from midwives was 389, and from doctors, parents, and institutions 342.

Infant Welfare Centres.—These are held at The Wylde and at Wood Street School, Elton. There are four sessions weekly, three at the former and one at the latter. The child on its first visit is seen by the Medical Officer of the Clinic, and subsequently at three-weekly intervals, or at shorter intervals should the Medical Officer or the Health Visitor consider it necessary. The children are weighed weekly, and records of the health of the child are kept. Advice regarding feeding and minor disorders is given. Cases requiring medical treatment are referred to their private doctor, as no treatment is undertaken at the clinics. The following tables gives particulars of clinic sessions and attendances :—

	The Wylde.	Wood Street.	Total.
Number of sessions held... ..	135	49	184
Number of new cases during year:—			
Under one year... ..	353	104	457
Over one year	50	18	68
Total number of children attending during year:—			
Under one year... ..	252	86	338
Over one year	594	237	831
Total attendances made:—			
Under one year	4271	1754	6065
Over one year... ..	4606	1461	6067
Average attendance per session ...	66	65	—

Table of Clinic Attendances during last ten years.

Year.	Sessions held.	Infants Attending.		Total Attendances.
		Under 1 Yr.	1-5 Yrs.	
1926	142	797	.....	5,727
1927	144	810	.....	6,374
1928	144	956	.....	7,040
1929	146	986	.....	7,605
1930	143	951	.....	7,477
1931	144	337	601	7,244
1932	143	367	647	9,777
1933	147	359	822	12,062
1934	150	309	809	11,307
1935	184	338	831	12,132

Certain cases requiring special treatment are referred to other departments or special clinics, namely:—

Dental.—35 patients have made 52 attendances.

Ophthalmic and Ear, Nose and Throat.—A few cases have been referred to the Consultants of these departments.

Orthopædic.—Arrangements are in force for cases to be referred to Lancashire County Council's Orthopædic Clinic at Whitefield. In-patient treatment is provided under the scheme if necessary at the Biddulph Orthopædic Hospital, and at Ancoats Hospital, Manchester.

Cases dealt with during 1935 :—

NEW CASES :—

First consultations with surgeon	17
Second or subsequent consultations with surgeon ...	6

OLD CASES :—

Consultations with surgeon	16
	—
Total	39
	—

Analysis of new cases :—

Knock-knees... ..	4	Valgus feet	4
Bow-legs... ..	3	Ectopia R. scapula ...	1
Rickets	1	Metatarsus varus ...	1
Torticollis	1	Not diagnosed	2
			—
		Total... ..	17

Total attendances (old and new cases) 91

Two children received in-patient treatment at Biddulph
Orthopædic Hospital.

Sunlight :—

Diagnosis.	No. of children receiving U.V.R.		Attendances.
	Treatment.		
Rickets... ..	10	.....	127
Malnutrition	40	.....	355
Anæmia	65	.....	504
Debility after			
(a) Chicken-pox	2	.....	30
(b) Scarlet Fever	1	.....	5
(c) Pneumonia	1	.....	15
Glands (Non-T.B.)	2	.....	14
Acidosis	1	.....	15
Neurosis	1	.....	4
Dermatitis	1	.....	2
Alopecia	1	.....	23
	—		—
	125	.....	1094
	—		—

Voluntary Workers.—A word of appreciation is due to the band of Voluntary Workers for their assistance and interest in the centres. By the arrangements for the sale of milk foods, proprietary medicines, etc., and in preparing tea for the mothers they render invaluable assistance.

The voluntary workers also have a fund from which they make grants, in deserving cases, of milk, cod liver oil and malt, proprietary milk food, etc. In addition, when necessary, babies are sent to the Babies' Hospital, Burnage, Manchester, and parents are given travelling expenses to take children to hospitals.

Ante-Natal Clinics.—Two ante-natal clinic sessions are held weekly, one at The Wylde and one at Wood Street School, Elton. Expectant mothers are sent to these clinics by their own doctors, midwives are sent by a health visitor, or come independently.

During 1935 the number of expectant mothers attending was 73 and 234 attendances were made. There were 16 primiparas and 57 multiparas. The number of mothers attending shows an increase of 24 over last year's figure.

Cases where a second opinion is considered desirable, or institutional treatment considered necessary, are referred to Dr. W. M. Martin at the Bury Infirmary, who, during the year under review, was appointed Obstetric Consultant to the Maternity and Child Welfare Department. Number of cases referred was five.

Cases were also referred to the Dental and Sunlight Departments as follows:—

DENTAL.

28 patients have made 52 attendances.

SUNLIGHT.

4 patients with Anæmia made 24 attendances.

1 patient with Debility made 5 attendances.

—	—
5	29
—	—

Post-natal cases are seen in conjunction with ante-natal cases. Eleven post-natal cases were referred to the dentist and they made 16 attendances. Eight post-natal patients made 53 attendances at the Sunlight Clinic.

Milk Assistance Scheme.—The Corporation has arranged for the provision of free milk (fresh and dried) to necessitous cases in which the family income, according to the number of persons, comes within a prescribed scale. Free milk is only supplied to persons who attend the Welfare Centres, and in all cases careful enquiries are made and statements as to income verified before a grant is made.

Number of applications for grants received ...	202		
„ „ „ refused ...	12		
		Cow's milk.	Dried milk.
„ „ granted free supply...	190	40	150
Approximate quantity	2,935 gallons	...	9,052 packets.
Approximate cost	£229	...	£641

The amount of dried milk sold at cost price during the year at the Welfare Centres was 5,234 packets to the value of £376.

Midwives.—The number of midwives registered as practising in the Borough was 24, and an additional 12 in practice at the Jericho Hospital. With the exception of the latter group visits were periodically made to their homes by the Assistant Medical Officer and by the Health Visitors to inspect case records, appliances, methods of practice, etc. The number of these visits was 109.

During the year there were five instances in which a midwife was compensated for loss of a previously booked case owing to removal to hospital.

The number of medical aid forms received from midwives in accordance with the rules of the Central Midwives' Board was 161.

Maternity and Nursing Homes.—One Maternity Home and one Joint Maternity and Nursing Home are registered in the Borough under the Nursing Homes Registration Act, 1927. One registered Maternity Home was closed voluntarily during the year. These Homes were inspected regularly during the year. Exemption from registration, under Section 6 of the 1927 Act, has been granted in the case of one Voluntary Institution (Bury Infirmary).

Maternal Mortality.—There were five maternal deaths during the year. Of these, three occurred at the Bury Infirmary and two at the Jericho Hospital. Two of the cases had not availed themselves of any ante-natal examination or treatment during pregnancy. Three cases attended ante-natal clinics—two at the Jericho Hospital and one at the Bury Infirmary. None attended the Ante-natal Clinics conducted by the Public Health Department.

The mortality rate was 6.65 per 1,000 live and still births. This rate for the previous year was 10.25 per 1,000 live and still births. During the past nine months there has been only one maternal death amongst women resident in Bury.

The sensational statements which appear in the Press from time to time regarding mortality go to instil a morbid fear of child bearing amongst women. A survey of the known factors to be considered in this problem is contained in the annual report for 1934, to which reference should be made.

Complicated Cases of Labour.—An agreement has been in force since June, 1920, under which cases of complicated labour are treated at the Bury Infirmary. Under this agreement during the year 1935, ten patients were treated at the Institution, as compared with six in the previous year.

Puerperal Fever and Puerperal Pyrexia.—Seven cases of Puerperal Fever were notified. Two of these cases died—one at the Bury Infirmary and one at the Jericho Hospital. Six of the cases occurred in hospitals and one was removed to the Florence Nightingale Isolation Hospital for treatment. Six cases of Puerperal Pyrexia were notified, and there were no deaths. Four of these cases occurred in hospital.

Ophthalmia Neonatorum.—Thirteen cases of Ophthalmia Neonatorum were notified during the year, the rate per 1,000 live births being 18.3, as compared with 10.8 per 1,000 births in 1934. The following table gives further particulars :—

Cases.	Notified.	Treated.		Vision Unimpaired.	Vision Impaired.	Total Blindness.	Deaths
		At Home.	At Hospital				
13	13	7	6	13	..	..	..

Instruction in Mothercraft.—During school term, two sessions weekly are held at the Wylde Clinic, where instruction is given by the Senior School Nurse of the Education Department. During the year there were 300 attendances. The arrangement with the Education Committee continues and girls in the last term at school attend in groups of not more than 30 at a time, each group attending for a period of six weeks, and they come from all the senior elementary schools.

Children Act, 1908, and Children and Young Persons Act, 1932.

The duties and powers under Part 1 of the Children Act, 1908, as amended by Part V. of the Children and Young Persons Act, 1932, are administered by this department.

The principal regulations are that notice must be given at least seven days before receiving the child, and the age of the child in respect of whom notice must be given is 9 years. In the case of a child being received in an emergency, which makes it impossible for the statutory notice to be given, the Authority must be notified at the earliest possible moment, not later than 12 hours after the emergency.

It is the duty of the local authority to appoint infant life protection visitors to visit from time to time to satisfy themselves as to the proper nursing and maintenance of such infants, or to give necessary advice on directions thereon.

The following is a summary of the work during 1935 :—

1. Number of Foster Parents on the Register—	
(a) at the beginning of the year	7
(b) at the end of the year	6
2. Number of Children on the Register—	
(a) at the beginning of the year	7
(b) at the end of the year	6
(c) who died during the year	0
(d) on whom inquests were held	0
3. Number of Visitors at the end of year who were:—	
I. (a) Health Visitors	4
(b) Female, other than Health Visitors	0
(c) Male	0
II. Number of persons or societies authorised to visit under the proviso to Section 2 (2) of the Act of 1908	0
4. Number of cases in which proceedings were taken during the year	0
5. Number of cases in which the local authority has given a sanction during the year under (a), (b), and (c) of Section 3	0
6. Number of orders obtained during the year under Section 67 of the Act of 1932	0

Boarding-out of Children.—The Council's administrative scheme under the Local Government Act, 1929, made Maternity and Child Welfare a declared service; therefore duties under the Order were imposed upon this department.

The following table shows the position at the end of the year :

	Male.	Female.
Number on Register, January, 1935	2	5
Number added during the year	0	0
Remaining on Register, December, 1935 ...	2	5

SUMMARY OF WORK OF THE HEALTH VISITORS.

Visits and Attendances.	No.
First Visits to notified births	693
Re-visits to infants under one year of age	3545
Re-visits to children over one and under five years	5400
Visits to expectant mothers	147
Re-visits to expectant mothers	348
Visits re deaths of infants under one year of age	37
Re-visits during the summer diarrhoea season	3026
Visits re infectious diseases (school notifications) :—	
Measles, Whooping Cough, Chicken-pox, etc.	577
Visits re Ophthalmia Neonatorum	24
Visits re Puerperal Fever and Puerperal Pyrexia	7
Visit re Pemphigus Neonatorum	1
Visits to houses in which cases of Tuberculosis have been notified	67
Re-visits to houses in which cases of Tuberculosis have been notified	1029
Visits to Midwives	94
Visits and enquiries re applications under milk assistance scheme	1613
Visits and enquiries re applications for extra nourishments under Tuberculosis Scheme	51
Visits re disinfection	33
Visits to Boarded-out and Nursed-out Children	59
Visits and enquiries re Medical and Hospital Fees	52
Visits for other causes	101
Attendances at Clinics :—	
Infant Welfare Centres	324
Ante-Natal Clinics	77
Sunlight Clinic	110
Immunisation Clinic	26
Tuberculosis, Morning Clinics	83
,, Evening Clinics	8
Total Visits	16904
Total Attendance at Clinics	628

MATERNITY AND CHILD WELFARE.

The following is a summary of a report sent to the Ministry of Health in the early part of 1935 and the early part of 1936 regarding the working of the Bury Municipal Maternity and Child Welfare Clinics:—

Welfare Clinics.

After Reorganisation.

Before Reorganisation.

Sessions.

AT THE WYLDE:

Monday—2 p.m. to 5 p.m.

Tuesday—2 p.m. to 5 p.m.

Friday—9-30 a.m. to 1 p.m.

Monday—2 p.m. to 5 p.m.

Thursday—2 p.m. to 5 p.m.

AT ELTON:

Wednesday—2 p.m. to 5
p.m. weekly.

Wednesday—2 p.m. to 5
p.m. fortnightly.

Attendances at Clinics.

The percentage of notified
births which attend clinics
is 66.3.

The percentage attending
was 60 to 63.

Ante- and Post-Natal Clinics.

Sessions.

AT THE WYLDE:

Wednesday—9-30 a.m. to
1 p.m. weekly.

Wednesday—2 p.m. to 5
p.m. fortnightly.

AT ELTON:

Friday—2 p.m. to 5 p.m.
weekly.

None held.

Total number of attendances
at clinics, 234.

Total attendances at clinics
previously, 119.

In addition the following facilities were available after the re-organisation in April, 1935:—

An artificial sunlight therapy clinic was instituted for the treatment of ante- and post-natal cases, nursing mothers and pre-school children, and an anti-diphtheria immunisation clinic was

provided for the immunisation of pre-school children. Dental treatment at the Municipal Dental Clinic was made available for expectant nursing mothers, and children under school age.

All the above clinics are held at The Wylde, Bury.

A consultant obstetrician was appointed as honorary consultant to the Corporation ante- and post-natal clinics and for cases of difficult labour within the borough. Arrangements were made for the compensation of midwives whose booked cases attended an ante-natal clinic or a general practitioner and were admitted to a hospital or home on the advice of the Medical Officer of the Clinic or of the general practitioner. All the facilities mentioned were entirely new and in conjunction with the amplified and re-arranged clinic sessions commenced in April, 1935. The results accruing from the reorganisation are satisfactory.

SECTION 9.

Miscellaneous.

SEWAGE DISPOSAL.

I am indebted to Mr. J. Bolton, Sewage Works Manager, for the following information regarding sewage disposal during 1935 :

The major portion of the sewage of the Borough and Tottington is treated at the Sewage Works at Blackford Bridge. Smaller works are situated at Walshaw, Unsworth, Foxley, and Kilner Croft, the latter three being in the added area of Unsworth. Work has so far advanced on the Hollins intercepting sewer that it has enabled the Hollins works to be practically abandoned. This intercepting sewer is part of a scheme to convey the whole of the sewage from the added area to the main works at Blackford Bridge.

The sewage of Bury is of a complex nature, consisting in addition to the ordinary domestic sewage, of trade waste waters from tanneries, fellmongers, wool-scouring, hatters, breweries, wineries, and crude gas liquor. Trade in many of these industries has shown a further improvement during the year, and consequently there has been a marked increase in trade waste waters which has had its effect on the difficulties experienced in treating the sewage.

The admission of trade waste waters from a firm of calico printers has increased the difficulties of treatment far more than was anticipated, and with the existing plant it is impossible to produce an effluent which will comply with all the requirements of the Mersey and Irwell Joint Committee. During the year a scheme of extensions has been prepared and submitted to the Ministry of Health which has met with their entire approval, and sanction for borrowing powers has been received.

The Ministry have asked for an innovation in regard to screening storm water in excess of six times the dry weather flow before passing to the river, and the Corporation have acceded to their request. The object of the Ministry in asking for this is to minimise the amount of solid and floating pollution which enters the river during times of heavy rains, and if the experiment is a success it may be that other authorities will be asked to adopt similar precautions.

The system at present in use consists of detritus tanks, screens, sedimentation tanks, and stormwater tanks. Two systems of oxidation follow the sedimentation tanks, i.e., four acres of percolating beds with humus tanks and two units of bio-aeration on the " Simplex " Surface Aeration principle.

The total volume dealt with in the complete plant was 1,205,070,000 gallons, being an average of 3,301,287 gallons per day. In the final oxidation process 562,366,000 gallons have been treated on the percolating beds and 642,704,000 gallons on the bio-aeration process. In addition to this 131,004,000 gallons have been treated in the stormwater tanks, making a grand total of 1,336,074,000 gallons.

The admission of the additional trade waste waters has completely disorganised the whole process of purification, and research work is now being carried on in an attempt to overcome the serious difficulties that have arisen.

The effluent is under the jurisdiction of the Mersey and Irwell Joint Committee, whose inspectors frequently visit the works. During the past year six samples of effluent have been taken from the smaller works and all have been classed good. The effluent from the main works is now rarely satisfactory, and hopes for better results cannot be realised until the proposed extensions have been carried out.

IRWELL VALLEY WATER BOARD.

MONTHLY RAINFALL AT WORKSHOP YARD, PARSONS LANE BURY, 1908 to 1935.

	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
January..	4.26	2.86	5.65	1.59	4.87	4.95	2.98	6.22	3.47	3.63	3.79	5.35	5.02	7.37	4.76	4.62	3.74	3.37	5.85	5.31	13.07	2.44	5.81	6.50	5.62	2.79	4.11	2.10
February.	3.87	2.67	4.27	5.02	1.71	1.73	2.64	5.04	4.75	1.53	5.87	1.19	4.75	0.50	5.26	6.84	1.33	7.45	4.63	2.25	6.33	1.32	0.47	6.23	0.13	3.81	0.56	4.89
March ..	3.37	3.39	0.88	2.11	6.46	5.02	5.93	1.89	2.37	2.99	2.13	7.06	3.74	3.64	3.30	2.17	1.75	2.41	2.86	6.09	3.09	1.52	3.32	0.44	2.82	2.97	2.83	1.65
April	2.50	3.63	2.71	2.93	1.00	4.96	1.96	1.83	3.59	1.88	1.04	2.59	5.01	1.70	2.53	3.81	2.28	2.96	1.92	3.21	1.04	1.29	2.34	3.48	4.23	2.10	2.64	3.57
May	3.16	2.35	3.30	2.46	3.13	3.39	2.55	1.53	2.78	1.58	3.13	2.11	7.22	2.67	2.03	4.30	5.57	4.52	3.33	1.90	1.58	3.50	2.48	2.89	5.05	2.20	3.19	1.16
June	2.02	2.69	3.31	3.04	5.95	2.58	1.56	2.75	3.13	2.40	1.87	1.67	3.16	0.44	2.68	0.91	2.32	0.06	2.43	4.74	7.23	1.36	1.81	5.51	0.79	2.16	1.97	3.74
July	5.02	6.83	4.14	0.22	5.34	1.17	4.89	4.51	2.02	2.31	3.98	2.07	8.17	1.89	4.91	5.04	4.57	1.99	2.28	3.04	2.33	3.83	5.89	5.07	4.47	3.12	2.59	1.91
August ..	3.45	3.24	6.05	2.47	7.58	2.98	3.46	5.62	3.30	6.64	3.64	3.87	2.73	6.07	5.04	6.02	7.09	5.43	5.24	7.27	6.26	5.86	7.13	6.57	1.18	4.06	1.63	1.63
September	3.93	2.65	0.21	4.03	1.76	2.06	4.77	0.61	2.78	2.48	12.53	1.88	3.02	1.47	4.57	4.70	4.62	4.53	4.15	6.41	0.74	2.13	3.97	3.92	4.89	1.38	3.59	7.20
October..	1.83	5.68	3.58	3.74	5.50	2.01	2.74	1.95	8.52	9.17	4.39	2.76	1.66	2.83	0.62	6.34	5.60	5.35	4.23	4.63	5.95	7.04	6.49	2.59	8.60	4.85	6.18	9.08
November	3.03	1.52	5.43	4.50	3.57	5.05	5.90	2.31	3.10	5.35	2.87	3.74	1.97	3.17	3.83	7.64	2.70	3.08	6.36	4.39	7.17	8.81	6.53	8.61	3.46	2.17	1.95	4.86
December	3.12	8.01	4.33	7.25	5.34	2.90	6.49	8.36	3.34	2.41	10.10	7.05	3.86	7.10	5.56	5.25	5.44	3.26	2.32	1.48	3.65	8.22	4.23	2.61	2.36	0.75	6.46	3.60
Total..	39.56	45.52	43.86	39.36	52.21	58.80	45.87	42.62	43.15	42.37	55.34	41.34	50.31	38.85	45.09	57.64	47.01	44.41	45.60	50.72	58.44	47.32	50.47	54.42	43.60	30.20	40.13	45.39

